

SEQUENCE LISTING

<110> Murray, Richard
Glynnne, Richard
Watson, Susan R.
EOS Biotechnology, Inc.

<120> Novel Methods of Diagnosis of Angiogenesis,
Compositions and Methods of Screening for Angiogenesis
Modulators

<130> 018501-000710US

<140> US 09/784,356

<141> 2001-02-14

<150> US 60/148,425

<151> 1999-08-11

<150> US 09/637,977

<151> 2000-08-11

<160> 135

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 1152

<212> DNA

<213> Homo sapiens

<400> 1

gttcgcgcgc	gccgcgcgcg	ccacctggag	ttttttcaga	ctccagattt	ccctgtcaac	60
cacgaggagt	ccagagagga	aacgcggagc	ggagacaaca	gtacctgacg	cctctttcag	120
cccgggatcg	cccagcagg	gatgggcgac	aagatctggc	tgcccttccc	cgtgctcctt	180
ctggccgctc	tgccctcggg	gctgctgcct	ggggcggccg	gcttcacacc	ttccctcgat	240
agcgacttca	cctttaccct	tcccgcgggc	cagaaggagt	gcttctacca	gcccatgccc	300
ctgaaggcct	cgctggagat	cgagtaccaa	gttttagatg	gagcaggatt	agatattgat	360
ttccatcttg	cctctccaga	aggcaaaacc	ttagtttttg	aacaaagaaa	atcagatgga	420
gttcacactg	tagagactga	agttgggtgat	tacatgttct	gctttgacaa	tacattcagc	480
accattttctg	agaagggtgat	tttctttgaa	ttaatcctgg	ataatatggg	agaacaggca	540
caagaacaac	aagattggaa	gaaatatatt	actggcacag	atatattgga	tatgaaactg	600
gaagacatcc	tgggaatccat	caacagcatc	aagtcagac	taagcaaaag	tgggcacata	660
caaaactctgc	ttagagcatt	tgaagctcgt	gatcgaaaca	tacaagaaag	caactttgat	720
agagtcaatt	tctgggtctat	ggttaattta	gtgggtcatg	tgggtggtgc	agccattcaa	780
gtttatatgc	tgaagagctct	gtttgaagat	aagaggaaaa	gtagaactta	aaactccaaa	840
ctagagtacg	taacattgaa	aaatgaggca	taaaaatgca	ataaactggt	acagtcaaga	900
ccattaatgg	tcttctccaa	aatattttga	gatataaaaag	taggaacacg	gtataatttt	960
aatgtgaaaa	ttaagtcttc	actttctgtg	caagtaatcc	tgctgatcca	gttgtaactta	1020
agtggtgtaac	aggaatatatt	tcgagaatat	aggtttaact	gaatgaagcc	atattaataa	1080
ctgcattttc	ctaactttga	aaaattttgc	aaatgtctta	ggtgatttaa	ataaatgagt	1140
attgggccta	aa					1152

<210> 2

<211> 2757

<212> DNA

<213> Homo sapiens

<400> 2

tctaaaggtc	gggggcagca	gcaagatgcg	aagcgagccg	tacagatccc	gggctctccg	60
aacgcaactt	cgccctgctt	gagcgaggct	gcggtttccg	aggccctctc	cagccaagga	120

aaagctacac	aaaaagcctg	gatactcat	cgaaccaccc	ctgaagccag	tgaaggctct	180
ctcgctctcg	ctctctagct	tcgcttgtag	tagcgccacc	ccggctctct	ggggacacag	240
gggttggaac	atggggccca	cagcgctccc	gtgtgtcaag	gccaccgcga	ctcggtgtct	300
tgactacgtc	aactatgata	tcactgtccg	gcattacaac	tacacgggaa	agctgaatat	360
cagcgcggaac	aagggaagaa	gcattataact	gacctcgggtg	gtgttctatt	tcactctgtg	420
ctttatcatc	ctggagaaac	cttttctgtt	gtcgaccatt	tggaaaacca	agaaattcca	480
ccgaccatg	tactatttta	ttggcaatct	ggccctctca	gacctgttgg	caggagtagc	540
ctacacagct	aaactctctc	tgctctggggc	caccacctac	aaactcactc	ccgccagctg	600
gtttctgcgg	gaagggagta	gttttctggc	ctcttcagcc	tcctgtttca	gtctctctcg	660
catcgccatt	gagcgctata	tcacaatgct	gaaaattgaa	ctccacaacg	ggagacaatc	720
tttcgcctc	ttctctctaa	tgcgcgctcg	ctgggtctac	tcctctatcc	tggttggtgt	780
gctctatcat	ggctgggaact	gcatacgtgc	gctgtccagc	tgctccaccg	tgctgccgct	840
ctaccacaag	cactataatc	ttctcttgac	cacgggtctc	actctgtctt	gtctctccat	900
cgctactctg	tactcgaaag	ttctactcctt	ggtcaggaat	cggagccgcg	gctcgactgt	960
ccgcaagaac	atttccaagg	ccagccgcag	ctctgagaat	gtggcgctgc	tcaagagcgt	1020
aattatcgtc	ctgagcgctc	ctctacgctg	ctggggcacc	ctcttccact	tgctctctgt	1080
ggatgtgggc	tgcagaaggta	agacctgtga	catcctctcg	agagcggagt	actctctggt	1140
ggtatgctgtg	ctcaactccg	gcaccaacct	catcatttac	actctgcaga	acaaggagat	1200
gcgtcggggc	ttcatccgga	tcatgtctctg	ctgcaagtgc	cctgacggag	actctgtctg	1260
caaatctcaag	cgaccactca	tcgcgcgcat	ggaaattcagc	cgcagcaaat	cggacaattc	1320
ctcccacccc	caggaagacg	aaggggacaa	cccagagacc	atatgtcttt	ctggaaactg	1380
caactctctt	ctctagaact	ggaagctgta	caccaccacc	aagcgcctctt	tgggtagctg	1440
ctggccaccc	cagtgtttgg	aaaaaaatct	ctgggcttcg	actgtctgca	gggaggagct	1500
tgctcagaacg	agagggaggga	agggggagaa	tacgaacaagc	ctgggtgtgt	cgggtgttgg	1560
tgggttagagt	tagttctctg	gaacaatgca	ctgggaaggg	tggagatcag	ctccggcgtc	1620
ggaatatata	ttctaccccc	ctggagcttt	gattttgcac	tgagccaaag	gtctagcatc	1680
gtcaagctctc	taaaagggtc	attttggccc	ttctccaaga	ctaatgtccc	catgtgaaag	1740
cgctctcttg	cttgagagct	tgaggagatg	ttttctctca	ctttagtgtc	aaacctcaagt	1800
gagtgtgtgc	actctgtcgt	ctttagggat	gccctgtaca	tcccacaacc	cacctctcct	1860
ttccctctata	ccccctctca	acgttctttt	actttatact	ttaactactc	gagagtatat	1920
agagctgggg	ttgtggaatg	atcgatcctc	tatagcaaat	aggctatggt	gagtacgtag	1980
ttctgtgggaa	gatgaagatg	gttttgaggt	gtaaaaccac	gtcctctctg	gaggccaaag	2040
gttctcatgta	agcgggatcc	gttttttgga	atttgggtga	agtcacttgt	attctcttaa	2100
aaaacatctt	ttcaatgaaa	tgtgttacca	tttcatatcc	attgaagccg	aaactctgcat	2160
aagggaagcc	actttatcta	aatgatatta	gccaggatcc	ttggtgtctc	aggagaaaca	2220
gacaaagcaa	acaaagtga	aaccgaatgg	atataacttt	gcaaaaccaag	ggagattttc	2280
tagcaaatga	gtctaaccaa	tatgacatcc	gtctttccca	cttttgttga	tgtttatttc	2340
agaattctgt	gtgatataat	tcaagcaaca	acatgttgta	ttttgtgtg	ttaaaagtac	2400
ttttcttgat	ttttgaatgt	atttgtttca	gaagaagtc	attttatgga	ttttcttaac	2460
ccgtgttgac	ttttctagaa	tcacacctct	tgtgcctcta	agcatattct	taactggtga	2520
ggaagcccaag	aactttttaag	tcacagtatt	cattagatga	taattgaaga	tattgtataa	2580
tattacaaag	aataaaaaata	tattactgtc	tcttttagtat	ggttttcagt	gcaattaaac	2640
cgagagatgc	ctgtgttttt	taaaagaagt	agttatttaat	aggtttctga	ttttcttgga	2700
tcatttttgc	catagcttta	tcaactttta	aacatataat	actcatgatt	ctttaaag	2757

```
<210> 3
<211> 3220
<212> DNA
<213> Homo sapiens
```

<400> 3

gagctgtccc	cggtagccgc	gacccgggcc	gtgccgtgtg	cccgtagctc	cagccgctgc	60
cctcctgata	tcctcgtctc	ccgctccgcc	ctcccttttc	ctccgtagaa	cttgcgtcct	120
tctctctctc	cgcatcgtaa	tctgtctcgt	ttcttttagc	cctctcagac	caaaagaacc	180
ccagacaaca	gatgcccata	ccgacgctat	agcagtaact	cccagcgtgc	gtttctgtgc	240
cgtagctttac	agtatattaat	tttatataat	atataatttt	tattatagca	tttttgatac	300
ctcatattct	gtttacacat	cttgaaagcg	gctcagtagt	tctcttacta	aaacaacctt	360
actccagaga	atggccaacg	tgattaccag	tactacagct	gctaccgccg	ctctctggctc	420
tttgggtggac	tacctatgga	tgtctcatct	gggcttcatt	attgcatttg	tctctggcatt	480
cccctgtggga	ccaatgtgac	tgccaatttc	ttttgttgca	gctgtgggct	caggtgtagt	540
gacccctgaag	gcagcctgca	tctcagctag	catctttgaa	acagtgttct	ctgtcttact	600

gggggcaaaa	gtgagcgaaa	ccatccggaa	gggcttgatt	gacgtggaga	tgtacaactc	660
gactcaaggg	ctactgtatg	ccggctcagt	cagtgctatg	tttggttctg	ctgtgtggca	720
actcgtggct	tctcttttga	agctccctat	ttctggaacc	cattgtattg	ttgggtgcaac	780
tatttggttct	tcctctgctg	caaaggggca	ggagggtgtc	aagtggtctg	aactgataaa	840
aattgtgatg	tcttggtctg	tgtccccact	gctttctgga	attatgtctg	gaattttatt	900
cttcctgggt	cgtgcattca	tcctccataa	ggcagatcca	gttcctaatt	gtttgcgagc	960
tttgccagtt	ttctatgcct	gcacagtttg	aataaacctc	ttttccatca	tgtatactgg	1020
agaccggttg	cttgggctttg	acaaaacttc	tctgtggggt	accatcctca	tctcgggtggg	1080
atgtgcagtt	ttctgtgccc	ttatcgtctg	gttctttgta	tgtcccaggga	tgaagagaaa	1140
aattgaaacga	gaaataaaagt	gtagtccctc	tgaagccccc	ttaatggaaa	aaaagaatag	1200
cttgaaaagaa	gacctatgaag	aaacaaagt	gtctgttggt	gatattgaaa	acaagcatcc	1260
tgtttctgag	gtagggcctg	ccactgtgcc	cctccaggct	gtgtgggagg	agagaacagt	1320
ctcattcaaaa	cttgagagtt	tggaggaagc	tccagagaga	gagaggcttc	ccgcgctgga	1380
cttgaaaagag	gaaaccagca	tagatgcac	cgtgaatggt	gcagtgagtg	ctcttaattgg	1440
gaaccttctgc	cagttcagtc	aagccgtcag	caaccaaaata	aactccagtg	gccactccca	1500
gtatcacacc	gtgcataaag	attccggcct	gtacaaagag	ctactccata	aattacatct	1560
tgccaagggtg	ggagattgca	tgggagactc	cggtgacaaa	cccttaaggc	gcaataatag	1620
ctatacttcc	tataccattg	caatatgtgg	catgcctctg	gattcatctc	gtcccaagaa	1680
agggtaaacag	aaggggcgaag	aaatggagaa	gctgacatgt	ctaatgcag	actccaagaa	1740
gcgaattcga	atggacagtt	acaccagtta	ctgcaatgct	gtgtctgacc	ttcactcagc	1800
atctgagata	gacatgagtg	tcaaggcagc	gatgggtcta	ggtgacagaa	aaggaagtaa	1860
tggtctctcta	gaagaatggg	atgaccagga	taagcctgaa	gtctctctcc	tcttccagtt	1920
cctgcagatc	cctacagcct	gctttgggtc	attcgcctat	ggtgccaatg	acgtaagcaa	1980
tgccattggg	cctctgggtg	cttttatatt	ggtttatgac	acaggagatg	tttcttcaaa	2040
agtggcaaca	ccaatatggc	ttctactcta	tgggtggtgt	ggatatctgtg	ttggtctgtg	2100
ggtttggggga	agaagagtta	tcacagacct	ggggaaggat	ctgacaccga	tcacaccctc	2160
tagtggtctc	agtattgaac	tggcactctg	cctcactgtg	gtgatttgcac	caaatatttg	2220
ccttcccctc	agtacaacac	attgtaaaagt	gggctctgtt	gtgtctgttg	gctggctccg	2280
gtccaagaag	gctgtgtgact	ggcgtctctt	tcgtaacatt	tttatggcct	ggtttgtcac	2340
agtcgccatt	cttgaggtta	tcagtgctgc	catcatggca	atcttcagat	agtcacatcc	2400
cagaatgtga	agctgtttga	gattaaaaatt	tgtgtcaatg	tttgggacca	tcctagggtat	2460
tctgtctccc	ctgaagaatg	attacagttg	taacagaaga	ctgacaagag	tctttttatt	2520
tggggcagca	tggaggaagt	gttactctgc	ctataactgc	ttttgtgcta	aatatgaatt	2580
gtctcaaaat	tagctgtgta	aaatagcccg	ggttccactg	gctcctgtgt	agggtccctt	2640
tccttctggg	ctgtgaattc	ctgtacatat	ttctctactt	tttgtatcag	gcttcaattc	2700
catattgttt	ttaatgtgtc	tcgtgaagatg	acttgtgatt	tttttttctt	tttttttaac	2760
catgaagagc	cgtttgacag	agcatgctct	gcgttggttg	tttcaccagc	ttctgccctc	2820
acatgcacag	ggattttaaca	acaaaaatat	aactacaact	tccttgttag	tctcttatat	2880
aagtagagtc	cttggtactc	tgcctcctg	tcagtagtgg	caggatctat	tggcatatct	2940
gggagcttct	tagagggatg	aggttctttg	aacacagtg	aaattttaat	tagtaacttt	3000
tttgcaagca	gtttattgac	tgttattgct	aagaagaagt	aagaagaaa	aagcctgttg	3060
gcaactcttg	ttatttcttt	aagatttctg	gcagtggtgg	atggatgaat	gaagtggaat	3120
gtgaactttg	ggcaagttta	tgggacagc	cttccatggt	catttgtcta	cctcttaact	3180
gaataaaaaa	gcctacagtt	tttagaaaaa	accggaattc			3220

<210> 4

<211> 1743

<212> DNA

<213> Homo sapiens

<400> 4

aaagaaggta	agggcagtg	gaatgatgca	tcttgcatc	cttgtgtctg	tgtgtctgcc	60
agtcgtctct	gcctatcctc	tgagtggggc	agcaaaagag	gaggactcca	acaaggatct	120
tgcccagcaa	tacctagaaa	agtactacaa	cctcgaaaag	gagtgtgaaac	agtttagaag	180
aaaggacagt	aatctcattg	ttaaaaaaat	ccaagggaatg	cagaagttcc	ttgggttgga	240
gggtgacaggg	aagctagaca	ctgacactct	ggaggtgatg	cgcaagccca	gggtgtggagt	300
tctgcagctt	ggctcactca	gctcctttcc	tggcatggcg	aagtgaggga	aaacccaact	360
tacatacagg	attgtgaatt	atacaccaga	tttgccaaga	gatgctgttg	attctgccat	420
tgagaaagct	ctgaaggtct	gggaagaggt	gactccacte	acattctcca	ggctgtatga	480
aggagaggct	gatataatga	tctctttcgc	agttaaagaa	catggagact	tttactcttt	540
tgatggccca	ggacacagtt	tggctcatgc	ctaccacact	ggacctgggc	tttatggaga	600

tattcacttt	gatgatgatg	aaaaatggac	agaagatgca	tcaggcacca	atttattcct	660
cgttgctgct	catgaacttg	gccactccct	ggggctcttt	cactcagcca	acactgaagc	720
tttgatgtac	ccactctaca	actcattcac	agagctcgcc	cagttccgcc	tttcgcaaga	780
tgatgtgaat	ggcattcagt	ctctctacgg	acctccccct	gcctctactg	aggaacccct	840
ggtgccccaca	aaatctgttc	cttcgggatac	tgagatgcca	gccaaagtgtg	atcctgcttt	900
gtccttcgat	gccatcagca	ctctgagggg	agaatatctg	ttcttttaaag	acagatatatt	960
ttggcggaaga	tccacttgga	accctgaacc	tgaatttcac	ttgatattctg	cattttggcc	1020
ctctcttcca	tcatattttg	atgctgcata	tgaagttaac	agcaggggaca	ccggtttttat	1080
ttttaaagga	aatgagttct	ggggccatcag	aggaatatgag	gtacaagcag	gttatccaag	1140
aggcatccat	accctggggt	ttcctccaac	cataaggaaa	attgatgcag	ctggtttctga	1200
caaggaaaaag	aagaaaacat	actttctttgc	agcggacaaa	tactggagat	ttgatgaaaa	1260
tagccagttcc	atggagcaag	gcttcccttag	actaatagct	gatgactttc	caggagttga	1320
gcctaagggtt	gatgctgtat	tacaggcatt	tggatttttc	tacttcttca	gtggatcatc	1380
acagtttgag	tttgacccca	atgccaggat	ggtgacacac	atattaaaga	gtaacagctg	1440
gttacattgc	tagggcagat	agggggaaga	cagatatggg	tgtttttaat	aaatctaata	1500
attattcatc	taattgtata	tgagccaaaa	tgggttaatt	ttcctgcctg	ttctgtgact	1560
gaagaagatg	agccttgcat	atatctgcat	gtgtcatgaa	gaatgtttct	ggaattcttc	1620
acttgctttt	gaattgcact	gaacagaatt	aagaaatact	catgtgcaat	aggtgagaga	1680
atgtattttc	atagatgtgt	tattactttc	tcaataaaaa	gttttatttt	gggctgttc	1740
ctt						1743

<210> 5
 <211> 5869
 <212> DNA
 <213> Homo sapiens

<400> 5						
aaacgcgcgc	caggacgcag	cgcgcgcgcg	cgccgctcct	ctgccactgg	ctctgcgcgc	60
cagcccggtc	ctgtctgcagc	ggcaggggagg	aagagccgcg	gcagcgcgac	tcgggagccc	120
cgggccacag	cctggccttc	ggagccaccc	acaggcctcc	ccgggcggcg	ccacgcctcc	180
taccgcccgc	acgcgcgcat	cctccgcgcg	caccgcagcc	acctgctccc	ggcccgaggg	240
cgacgacacg	atgcgctgcg	cgctggcgct	ctcggcgctg	ctgctatctt	tgtcaaegcc	300
gcccgtgctg	ccgtctgcgc	cgctgcgcgc	gccgtgcgcg	tcgcccctcc	agaatgcaac	360
ccagactact	acggactcat	ctaaacaaaac	agcaccgact	ccagcatcca	gtgtccacct	420
catggctaca	gatacagccc	acgagagcac	agtccccac	ttcaagctga	acgaaatcct	480
ggcctcggtc	aaggcgacca	cccttggtgt	atccagtgc	tcacggggga	ctacaacccct	540
ggctcagcaa	gtctcaggcc	cagtcacac	taccgtggct	agaggaggcg	gctcaggcaa	600
ccctactacc	accatcgaga	gccccaaag	cacaaaaagt	gcagacacca	ctacagttgc	660
aaacctccaca	gccacagcta	aacctaacac	cacaagcagc	cagaatggag	cagaagatac	720
aaacaaactct	ggggggaaaa	gcagccacag	tgtgaccaca	gacctcacat	ccactaaggc	780
agaacactctg	acgacccctc	accctacaag	tccacttagc	ccccgacaac	ccactttgac	840
gcattcctgtg	gcccacccaa	caagctcggg	acatgacat	cttatgaaaa	tttcaagcag	900
ttcaagcact	gtggctatcc	ctggctacac	cttcacaagc	ccgggggatga	ccaccaccct	960
accgtcatcg	gttatctctgc	aaagaactca	acagacctcc	agtcagatgc	cagccagctc	1020
tacggccccct	tctctccagg	agacagtgc	gccccagcgc	ccggcacaag	cattgagaac	1080
acctaccctg	ccagagacca	tgagctccag	ccccacagca	gcatacaacta	cccaccgata	1140
ccccaaaaca	ccttctccca	ctgtggctca	tgagagtaac	tgggcaaatg	gtgaggtatc	1200
tgagacacag	acacagagtg	agaagcagct	cgtcctgaac	ctcacaggaa	acacctctg	1260
tgaggggggc	gcttcggatg	agaaattgat	ctcactgata	tgccgagcag	tcaaagccac	1320
cttcaacccg	gccccagata	agtgctggcat	acggctggca	tctgttccag	gaagtgcagac	1380
cgtggtcgtc	aaagaaatca	ctattcacac	taagctccct	gccaaggatg	ccagcagcgc	1440
gctgaaggac	aaatgggatg	aactaaagga	ggcagggggtc	agtgacatga	agctagggga	1500
ccagggggcca	ccggaggagg	ccgaggaccg	cttcagcatg	ccccctcatc	tcaccatcgt	1560
ctgcattggcg	tcaattcctg	gcccctctat	ggctcgtccc	agctcgtccc	accagcgcct	1620
ctcccagagg	aaggaccagc	agcggctaac	agaggagctg	cagacagtgg	agaatggttt	1680
ccatgacaac	ccaacactgg	aagtgtatga	gacctcttct	gagatgcagg	aggaagaagtg	1740
ggtcagcctc	aacgggggagc	tgggggacag	ctggatcgtc	ctctgcagca	actgagccaa	1800
ggacgacctg	gatgaggagg	aagacacaca	cctctagtcc	ggtctgcgcg	tggcctccag	1860
cagcaccaca	gagctccaga	ccaacacccc	caagtgcctg	ttggatgggg	aagggaaga	1920
ctggggaggg	agagtgaact	ccgaggggtg	tcccctccca	atccccccag	ggccttaatt	1980
tttccctttt	caacctgaac	aaatcacatt	ctgtccagat	tctcttgtta	aaataaccaca	2040

ctagtgcctg	agctcagctgc	tgttggtatga	tgaggggagat	caagaaaaag	ccacgtaagg	2100
gacttttatg	atgaactcagt	ggaatccctt	cattctgcag	tgagattgcc	gagacctgaa	2160
gaggggtaag	tacttgccca	aggtcagagc	cacttggtga	cagagccagg	atgagaacaa	2220
agatttcatt	tgaccactgc	cacactgctg	tgttcacatg	tgccctccgt	ccagagcagt	2280
cccggggagg	gggtgaaactc	cagcaggtgg	ctgggctgga	aaggagggga	gggctacatc	2340
ctctgcctgt	gggactctgac	gacctgaag	tcgacctccc	aagttttcct	ctctccatcc	2400
cagcctcgtg	tacctatctt	ccaacctctt	atgtttctac	ccctccctac	actcagtggt	2460
tgttcccaat	tactctgtct	tggggacctt	gggattagca	caggttattc	ataaccttga	2520
accctctgtt	ctggtactcgg	attttctcac	atttggtctg	tgagattggg	gcttaaccga	2580
cacaggtctc	cgtgcgtgaa	ccaggtctct	ttaggggacc	tgctgtcagg	tgaggagaga	2640
agggggacact	cgagtccagg	ctggtattct	agggcagctg	atgagggggt	acaggaacaa	2700
ctgggccatt	gcccctggga	ctccttgtag	agggcaccca	cgactctctt	tgggcttcca	2760
tttccaccag	ggactaaaaat	ctcgtctagc	tactgagagc	agcgtgttcc	ttttggtggt	2820
cactgtctcag	ctgatgggag	tgatctcctg	agacctagta	tgaagagcta	gtggctgcag	2880
gagagccctt	cccggggccc	cccatcagcg	atgtgtcttc	agagacaatc	cattaaagca	2940
ggcaggaatg	acaggtcttc	ccctgtatat	cataggaaac	tcaggagcat	ttcaagttgc	3000
tgagagtgtt	gttttagtgt	ttttctaac	cagccctcca	ctggccaaag	ccaaaagctc	3060
agacagttgg	cagacgtcca	gttagctcat	ctcaactca	ctgattctcc	tgtgccacag	3120
gaaaagaggg	ctcgggaaag	gcagtgcatg	ctgggtgcag	gaagggcagc	ctgggggaca	3180
gactgttggt	ggaaactctc	actgtcctgg	cttgagacta	ggcctgtcgt	ttcctcttct	3240
ctgtgagcct	agtggggctg	ctgcggttct	cttgagcttt	ctggtggcat	ctcaggggaa	3300
cacaaaaagt	atgtctatct	cccaatatag	gacttttatg	ggctcggcag	ttagctggca	3360
tgtatgaagg	tcctacagcag	tgggcactgt	gaggtttcat	ctgattgaga	agggggaaatc	3420
ctgtgtgtaa	tgttgaaact	tcgccatggt	ctccatcgtt	ctgggcgtaa	atctccctgg	3480
atcaagttag	aaaaatggca	gaactgctta	gggaaagtga	attgccattt	ttccgggtgaa	3540
acgcacacag	tcagggggtct	taagagtcag	gtccgggtg	tagtagctct	gatgaaatag	3600
gctatccact	cgggattgctt	tactttttaa	aaaggttagg	ggagggggctg	gggaagatct	3660
gtctctgacc	atctcgtctaa	ttcctctctc	acaggtctga	ggcaatcgat	atccatgggg	3720
gaaaaggaa	gccagggggtt	cacatagggc	cccagcgagt	ttccaggag	ttagagggat	3780
gcgaggtctaa	caagttccaa	aaacatctgc	cccagtgctc	tagtgtttgg	aggtggggcag	3840
gatggagaac	agtgctcgtt	tgggggaaaa	caggaaatct	tgttaggctt	gagtgagggt	3900
tttgcttctt	tcttgccacg	cgctgggttc	ctctccacca	tgagttgttt	tgttggtgct	3960
ccgtggggaga	ggccagactct	gattattctt	cccttgctga	gtcgtgggtc	cacttcacca	4020
gccaggggtg	ttgacggaga	cagcaaatag	gcctctgcaa	atcaatcaaa	ggctgcaacc	4080
ctatggcctc	ttggagacag	atgatgactg	cgaaaggcta	gagagcagga	gtgcctggcc	4140
aggtcggctc	tgactctcct	cactctccat	cgctctgtcc	aaggagaacc	cggagaggct	4200
ctgggctgat	tcagaggtta	ctgctttata	ttcgtccaaa	ctgtgttagt	ctaggcttag	4260
gacagcttca	gaatctgaca	ctcttgctgc	ctcttgccac	caggacacct	atgtcaacag	4320
gccaaacagc	catgcatcta	taaaagtgat	catctctctg	cacctttact	gggttctaaa	4380
tgctctctga	taattcagag	agcattgggt	ctgggaagag	gtaagaggaa	cactagaagc	4440
tcagcatgac	ttaaacaggt	tgtatgcaaa	acagttttac	ataacctctt	tcagtggtaa	4500
actgtggttt	cccacaggtg	cacaggagcg	cagaaatcac	aagtatgatg	acaggaagc	4560
ctactgtcat	gagagtgggg	agacaggcag	caaaagctta	gaaggaggta	cagaattatc	4620
tttgcgttgt	aagacagtag	acgggtttaa	tctagtctag	gcrcagatt	ttttcccg	4680
ttgataagga	aagctagcag	aaagtttatt	taaacacttt	cttgagcttt	atcttttttg	4740
acaatatact	ggagaaactt	tgaagaacaa	gttcaactag	atacatatac	acatattttt	4800
ttgataatgt	aaatacagtg	accatgttaa	ctacacctgc	actcgtttaa	gtgaacatac	4860
tttgaaaag	cattatgtta	gctgagtgtat	ggccaagtgt	tttctctgga	caggaatgta	4920
aatgtctttac	tgcaaatgac	aagttttttg	tgtatttttt	tttttaaaaa	aaaaatgaaa	4980
tataacaaga	caaaacttatg	ataaagtatt	tgtcttgtag	atacgggtgt	ttggtttggt	5040
tttttaattt	taaaatgcaa	ccctgcccc	tcocccagca	agtcacagct	ccatttcagt	5100
aaaggttggg	gtcaaatatg	ctcgttttag	agggcaacct	gtagctcatg	agaaaggtat	5160
ttcaagatct	agtcocattct	ttttctagc	aaaaagataa	ctctgaagctc	acaaagatga	5220
agtgacttcc	tcaaaatcac	atgggtcagg	acagaaacaa	gattaaaaac	tggatccaca	5280
gactgtgcgc	ctcagaagag	ataatcggtta	aattaagaat	tgctactcga	aggtgccaga	5340
atgacacaaa	ggacagaatt	ctctttccag	tgttatccct	agcaaggcta	gggagggcat	5400
gacacacaaa	ataagaactg	gtctttccac	actaatctct	aatcatttag	gtttaaagatg	5460

atgttcaaca	gtttgccag	gaactggggg	atcatatatg	tcttagtgga	caggggtctg	5760
aagtacactg	gaatttactg	agaaacttgt	ttgtaaaaac	tatagttaat	aattattgca	5820
ttttcttaca	aaaatatatt	ttggaaaatt	gtatactgtc	aattaaagt		5869

<210> 6
 <211> 2742
 <212> DNA
 <213> Homo sapiens

<400> 6						
ctagtattct	actagaactg	gaagattgct	ctccgagttt	tttttttggt	atttttgttaa	60
aaaataaaaa	gctttgagcag	caattcatat	tactgtcaca	ggattttttg	ctgtgctgtg	120
caaggttaact	ctgctagcta	agattcacia	tggtgaaagc	ccttttccta	actatgctga	180
ctctggcgct	ggtcaggtca	caggacaccc	aagaaacccat	cacgtacacg	caatgcactg	240
acggatattga	gtgggattcct	gtgagacagc	aatgcaaaga	tattgatgaa	tgtagacattg	300
tccagagcgc	ttgtaaagggt	ggaaatgaagt	gtgtcaacca	ctatggagga	tacctctgcc	360
ttccgaaaaac	agcccagatt	attgtcaata	atgaacagcc	tcagcaggaa	acacaaccag	420
cagaaggaac	ctcaggggca	accaccgggg	ttgtagctgc	cagcagcatg	gcaaccagtg	480
gagtggttgc	cgggggtgggt	tttggggcca	gtgctgtgc	agtcgcaggg	cctgaaatgc	540
agactggcgc	aaataacttt	gtcatccggc	ggaacccagc	tgaccctcag	cgcattccct	600
ccaacccctc	ccaccgtatc	cagtgtgcag	caggctacga	gcaaagtga	ccacaacgtg	660
gccaaagacat	agacgagtg	actgcaggga	cgcacaaactg	tagagcagac	caagtgtgca	720
tcaattttacg	gggattccttt	gcatgtcagt	gccctcctgg	atatcagaag	cagggggagc	780
agtgcgtaga	catagatgaa	tgtaccatcc	ctccatattg	ccaccaaaaga	tgcgtagaata	840
caccaggctc	atttttattgc	cagtgcgatc	ctgggtttca	attggcagca	aacaactata	900
cctgcgtaga	tataaatgaa	tgtgatgcca	gcaatcaatg	tgctcagcag	tgctacaaca	960
ttcttggttc	attcatctgt	cagtgcaatc	aaggatatga	gctaagcagt	gacaggctca	1020
actgtgaaga	cattgatgaa	tgacgaacct	caagctacct	gtgtcaatat	caatgtgtca	1080
atgaacctgg	gaaattctca	tgtatgtgcc	cccaggggata	ccaagtgggt	agaagttagaa	1140
catgtcaaga	tataaatgag	tgtagagcca	caaagtgaatg	ccgggaggat	gaaatgtgtt	1200
ggaattatca	tgccggcttc	cgttgtttat	cacgaaatcc	ttgtcaagat	ccctacattc	1260
taacaccaga	gaaccgatgt	gtttgcccag	tctcaaatgc	catgtgccga	gaactgcccc	1320
agtcacatagt	ctacaaatcc	atagcatatc	gatctgatag	gtctgtgcca	tcagacatct	1380
tcagatatac	ggccacaact	atttatgcca	acaccatcaa	tacttttcgg	atataatctg	1440
gaaatgaaa	tgagaggttc	taacctacgc	aaacaagtcc	tgtaagtcca	atgcttgtgc	1500
tcgtgaagtc	attatcagga	ccaagagaac	atatcgtgga	cctggagatg	ctgacagtca	1560
gcagtatagg	gaacctccgc	acaagctctg	tgtaagatt	gacaataata	gtggggccat	1620
tttcatttta	gtcttttcta	agagtcaacc	acaggcattt	aagtcagcca	aagaatattg	1680
ttaccttaaa	gcactatttt	atttatagat	atatctagt	catctacatc	tctatactgt	1740
acactacccc	ataacaaaca	attacacccat	gggtataaagt	gggcatttaa	tatgtaaaga	1800
ttcaaagttt	gtctttatta	cttatgttaa	attagacatt	aatccactaa	actggctctc	1860
ttcaagagag	ctaagtatac	actatctggt	gaaacttgga	ttctttccta	taaaagtggg	1920
accaagcaat	gatgatcttc	tgtgtgtgct	aaggaaactt	actagagctc	cactaacagt	1980
ctcataagga	ggcagccatc	ataaccattg	aatagcatgc	aagggttaaga	atgagttttt	2040
aactgctttg	taagaaaaat	gaaaagggtca	ataaagatat	atttcttttag	aaaaatgggg	2100
ctgcgcata	ttgtgttggt	ttttattttc	atatccagcc	taaaagggtg	tggtttattat	2160
atagtaataa	atcattgctg	tacaacatgc	tggtttctgt	agggtatttt	taattttgtc	2220
agaaatttta	gattgtgaat	atttttgtaa	aaacagtaag	caaaattttc	cagaattccc	2280
aaaatgaacc	agataacccc	tagaaaaatta	tactattgag	aaatctatgg	ggaggatattg	2340
agaaaaataa	ttccttctaa	accacattgg	aactgacctg	aagaagcaaa	ctcggaataa	2400
ataataacat	ccctgaattc	aggcattcac	aagatgcaga	acaaaaatga	taaaagggtat	2460
ttcactggag	aagtttttaat	ttctaagtaa	aattttaaatc	ctaaccattc	actaatttat	2520
aactaaaaat	tctcatcttc	gtacttgtatg	ctcacagagg	aagaaaaatg	tgatggtttt	2580
tattctctgc	atccagagtg	acagtgaaat	taagcaaaat	accctctctc	ccaattctat	2640
gggaatatttt	atacgtctcc	ttgttttaaa	tctgactgct	ttactttgat	gtatcatatt	2700
tttaataaaa	aataaatatt	ccttttagaag	atcactctaa	aa		2742

<210> 7
 <211> 3583
 <212> DNA
 <213> Homo sapiens

<400> 7

acttcgctct	cgccctccgg	ccaagcatgg	ggcttcccag	gctgggtctgc	gccttcttgc	60
tcgcgcgctg	ctcgtgctgt	cctcgcgctg	cgggtgtgccc	cggagaggct	gagcagcctg	120
cgctcgagct	ggtggaggtg	gaagtgggca	gcacagccct	tctgaagtgc	ggcctctccc	180
agtcaccaag	caacctcagc	catgtcgact	ggttttctgt	ccacaaggag	aagcgggacgc	240
tcattcttcg	tgtgcgcacg	ggccaggggc	agagcgaaacc	tggggagtagt	gagcagcggc	300
tcagcctcca	ggacagaggg	gctactctgg	ccttgactca	agtaccccc	caagacggagc	360
gcattcttct	gtgccagggc	aagccgcctc	ggctccaggga	gtaccgcatac	cagctccgcg	420
tctacaaagc	tccggaggag	ccaacatctc	agggtcaaccc	cctgggcatc	cctgtgaaca	480
gtaaggagcc	tgaggaggtc	gctacctgtg	tagggaggaa	cgggtacccc	attcctcaag	540
tcattctggt	caagaatggc	cggcctctga	aggaggagaa	gaaccgggtac	cacattcagt	600
cgtcccagac	tgtggagtgc	agtggtttgt	acaccttgca	gagtattctg	aaggcacagc	660
tgggttaaaga	agacaaagat	gcccagtttt	actgtgagct	caactaccgg	ctgcccagtg	720
ggaaccacat	gaaggagctc	agggaagtca	cgtccctctg	tttctacccc	acagaaaaag	780
tgtggctgga	agtggagccc	tggggaatgc	tgaagggaagg	ggaccgcgtg	gaaatcaggt	840
ttgtggctga	tggcaacacct	ccaccacact	tcagcatcag	caagcagaac	ccagcaccca	900
gggaaggcaga	ggaagagaca	accaacgaca	acggggctct	gggtgctggag	cctgcccggga	960
aggaacacag	tgggcgctat	gaatgtcagg	cctggaaactt	ggacaccatg	atatcgctg	1020
tgagtgaaga	acagggaacta	ctggtgaact	atgtgtctga	cgtccagtagt	agtcocgcag	1080
cccctgagag	acaggaaggc	agcagcctca	ccctgacctg	tgaggcagag	agtagccagg	1140
acctcgagtt	ccagtggtcg	agagaagaga	cagaccaggt	gctgggaaagg	gggctgtgct	1200
ttcagtttga	tgcactgaaa	cggggaggcag	gagggcggtc	tcgctgcgtg	gcgtctgtgc	1260
ccagcatacc	cggcctgaac	cgcacacagc	tggccaagct	ggcatttttt	ggcccccttt	1320
ggatggcatt	caaggagagg	aagggtgtggg	tgaaagagaa	tatgggtgtg	aatctgtctt	1380
gtgaagcgtc	agggcacccc	cggcccacca	ctcctggaa	cgtcaacggc	acgggcaagt	1440
aacaagacca	agatccacag	cgaagtctga	gcacctgaa	tgtcctcggt	accccgaggc	1500
tgttggagag	aggtgttgaa	tgacacggcct	ccaacgacct	gggcaaaaaac	accagcatcc	1560
tcttctcgga	gctgggtcaat	ttaaccaccc	tcacaccaga	ctccaacaca	accactggcc	1620
tcagcacttc	cactgcagct	cctcatacca	gagccaacag	cacctccaca	gagagaaaagc	1680
tgccggagcc	ggagagccgc	ggcggtgtga	tcgtggctgt	gattgtgtgc	atcctggtcc	1740
tggcggtgct	ggcgctgtgc	ctctatttcc	tctataagaa	gggcaagctg	ccgtgcaggc	1800
gtcagggaa	gcaggagatc	acgctgcccc	cgtctcgtaa	gaccgaactg	gtagtgaag	1860
ttaagtca	taagctccca	gaagagcag	gcctcctgca	gggcagcagc	gggtgacaaga	1920
gggctccggg	agaccaggga	gagaaataca	tcgatctgag	gcattagccc	cgaatcactt	1980
cagctccctt	ccctgcctgg	accattccca	gctccctgct	cactctttct	tcagccaaaag	2040
cctccaaaag	gactagagag	aagcctcctg	ctcccctcac	ctgcacaccc	cctttcagag	2100
ggccactggg	ttaggacctg	aggacctcac	ttggccctgc	aagccgcttt	tcagggaacca	2160
gtccaccacc	atctcctcca	cgttgagtga	agctcatccc	aagcaaggag	cccagttctc	2220
ccgagcgggt	aggagagttt	cttcgcagaac	gtgttttttc	tttacacaca	ttatggctgt	2280
aaatacctgg	ctctgccagc	cagctgagct	gggtagctct	cttgagctgc	tttctgccc	2340
caaaaggctg	cttcaccatc	ccaggtgcac	cactgaagtg	aggcacaccc	ggagccaggc	2400
gcctgtctat	gttgaagtgc	gctgttcaca	cccgtcccg	agagcacccc	agcggcatcc	2460
agaagcagct	gcagtggtgc	tgcccaccac	ctcctgctcg	cctcttcaaa	gtctcctgtg	2520
acatttttct	tttggtcaga	agccaggaa	tggtgtcatt	ccttaaaaga	tacgtgccgg	2580
ggccagggtg	gggtggtcac	gcctgttaac	ccagcacttt	gggagggcga	ggcggggcga	2640
tcacaaaagtc	aggacgagac	catctgtgct	aacacgggtga	aacctgtact	ctactaaaaa	2700
tacaaaaaaa	aaatagctag	gcgtagtgtg	tggcacctat	agtcocagct	actcggaagg	2760
ctgaagcaga	agaatggatc	gaatccagga	gggtggagctt	gcagtgagcc	gagaccgtgc	2820
cactgcactc	cagctcgggc	aacacagcga	gactccgtct	cgagggaaaaa	aaaagaaaaag	2880
acgcgtacct	gcggtgagga	agctggggcg	tgttttcgag	ttcaggtgaa	ttagcctcaa	2940
tcoccggtgt	cacttgtctcc	catagccctc	ttgatggatc	acgtataata	gaaagggcag	3000
ggggagcaga	caaagatgag	gtctacactg	tccttcatgg	ggattaaagc	tatggttata	3060
ttagcaccaa	acttctacaa	accaagctca	gggccccaac	cctagaaggg	cccataatgag	3120
agaaatggta	ttagggtagg	aaaaaggggg	ctgggtagag	cttcgggtgtg	gtgtgtctgt	3180
ctgtgtgtat	catcacatat	gtgtgtatat	atgggtttgt	caggtgtgtga	aatattgaaa	3240
ttgtttctct	tatatctgta	tgtatatata	tatatgaaaa	tatatatata	tatgaaaaaat	3300
aaagcttaat	tgtcccagaa	aatcatacat	tgctttttta	ttctacatgg	gtaccacagg	3360
aaacctgggg	cctgtgaaac	tacaaccaaa	aggcacacaa	aacctgttcc	agttggcagc	3420
agagatcagg	gggtacctct	gctctcagc	aaatggctca	agctctacca	gagcagacag	3480
ctacctact	tttcagcagc	aaaacgtccc	gtatgacgca	gcacgaaggg	cctggcaggc	3540
tgttagcagg	agctatgtcc	cttcctatcg	tttcogtcca	ctt		3583

<210> 8
 <211> 1970
 <212> DNA
 <213> Homo sapiens

<400> 8
 atattggagt agcaagaggc tgggaagcca tcacttacct tgcactgaga aagaagacaa 60
 agggccagat gcacagcttt cctccactgc tgctgctgct gttctgggggt gtggtgtctc 120
 acagcttccc agcgactcta gaaacacaag agcaagatgt ggacttagtc cagaaaatacc 180
 tggaaaaata ctacaacctg aagaatgatg ggaggcaagt tgaagagcgg agaaatagtg 240
 gcccgatggt tgaaaaattg aagcaaatgc aggaattctt tgggctgaaa gtgactggga 300
 aaccagatgc tgaaacctctg aaggtgatga agcagcccag atgtggagtg cctgatgtgg 360
 ctcatgttgt cctcactgag gggaacctc gctgggagca aacacatctg acctacagga 420
 ttgaaaatta cagccagat ttgccaagag cagatgtgga ccatgccatt gagaaagcct 480
 tccaactctg gagtaatgtc acacctctga cattcaccaa ggtctctgag ggtcaagcag 540
 acatcatgat atcttttgtc aggggagatc atcgggacaa ctctcctttt gatggacctg 600
 gaggaatctt tgctcatgct tttcaaccag gcccaggtat tggaggggat gctcattttg 660
 atgaagatga aaggtggacc aacaattcca gagagtacaa cttacatcgt gttgcggttc 720
 atgaactcgg ccattctctt ggactctccc attctactga tatcggggct ttgatgtacc 780
 ctagtctcac cttcagtggt gatgttcagc tagctcagga tgacattgat gccatccaag 840
 ccataatatg acgttcccaa aatcctgtcc agcccactcg cccacaacc ccaaaagcat 900
 gtgacagtaa gctaaccttt gatgctataa ctacgattcg ggggagatg atgtttctta 960
 aagacagatt ctacatgcgc acaaatccct tctacccgga agttgagctc aatttcattt 1020
 ctgtttttctg gccacaactg ccaaattggc ttacgaattt gccgacagag 1080
 atgaagtccg gtttttcaaa gggaataagt actgggctgt tcagggacag aatgtgtctac 1140
 acggatcccc caaggacatc tacagctcct ttggcttccc tagaactgtg aagcatatcg 1200
 atgctgctct ttctgaggaa aacactggaa aaacctactt ctttggtgtg aacaaatact 1260
 ggaggtatga tgaatatataa cgatctatgg atccaggtta tcccaaaatg atagcacatg 1320
 actttctctg aattggccac aaagttgatg cagttttcat gaaagatgga tttttctatt 1380
 tctttcatgg aacaagacaa tacaaaattg atcctaaaac gaagagaatt ttgactctcc 1440
 agaaagctaa tagctggttc aactgcagga aaaattgaac attactaatt tgaatggaaa 1500
 acacatgggt tagtcccaa gaaggtgttt tcctgaagaa ctgtctattt tctcagtcac 1560
 ttttaacctc tagagtcact gatacacaga atataatctt attataacct cagtttgcat 1620
 atttttttac tatttagaat gtgacccctt ttgtactgat ataatttagt tccacaaatg 1680
 gtgggtacaa aaagtcaagt ttgtggctta tggattcata taggccagag ttgcaaatag 1740
 cttttccaga gtatgcaact ctgagtttga tcccagagag cagcttcagt gacaaacata 1800
 tcctttcaag acagaaagag acaggagaca tagtctttg ccggaggaaa agcagctcaa 1860
 gaacacatgt gcagtcactg gtgtcacctc ggataggcaa gggataacct ttctaacaca 1920
 aaataagtgt tttatgtttg gaataaagtc aaccttggtt ctactgtttt 1970

<210> 9
 <211> 1155
 <212> DNA
 <213> Homo sapiens

<400> 9
 atggattgca gtaacggatc ggcagagtgt accggagaag gaggatcaaa agagggtggtg 60
 gggactttta aggcctaaga cctaataatgc acaccagcta ccatttttaa ggaaaaacca 120
 gaccccaata atctggtttt tggaaactgt ttacggatc atatgctgac ggtggagtgg 180
 tcctcagagt ttggatggga gaaacctcat atcaagcctc ttcagaacct gtcattgcac 240
 cctggctcat cagctttgca ctatgcagtg gaattatttg aaggatgaa ggcatttcga 300
 ggagttagata ataaaattcg actgtttcag ccaaacctca acatggatag aatgtatcgc 360
 tctgctgtga gggcaactct gccggattat gacaaaagag agctctttaga gtgtattcaa 420
 cagcttgbta aattggatca agaattgggc ccatattcaa catctgtacg tctgtatatt 480
 cgtcctgcat tcatttgaac tgagccttct cttggagtca agaagcctac caaagccctg 540
 ctctttgtac tcttgagccc agtgggacct tatttttcaa gtggaacctt taatccagtg 600
 tccctgtggg ccaatcccaa gtatgtaaga gcctggaaag gtgggaactg ggaactgcaag 660
 atgggaggga attacggctc atctcttttt gcccaatgtg aagacgtaga taatgggtgt 720
 cagcaggtcc tgtggctcta tggcagagac catcagatca ctgaagtggg aactatgaat 780
 cttttctctt actggataaa tgaagatgga gaagaagaac tggcactctc tccactagat 840
 ggcacatctc ttccaggagt gacaaggcgg tgcattctg acctggcaca tcagtggggg 900

gaattttaagg	tgtcagagag	atacctcacc	atggatgact	tgacaacagc	cctggagggg	960
aacagagtga	gagagatggt	tagctctggt	acagcctgtg	ttgtttgcc	agtttctgat	1020
atactgtaca	aaggcgagag	aatacacatt	ccaactatgg	agaatggtcc	taagctggca	1080
agccgcatct	tgagcaaatt	aactgatatc	cagtatggaa	gagaagagag	cgactggaca	1140
atttgtctat	cctga					1155

<210> 10
 <211> 1837
 <212> DNA
 <213> Homo sapiens

<400> 10						
ctcaaaactca	gctcacttga	gagtcctctc	ccgccagctg	tggaaagaac	tttgcgtctc	60
tccagcaatg	catctccttg	cgattctgtt	ttgtgctctc	tggtctgcag	tgttggccga	120
gaactcggat	gattatgatc	tcatgtatgt	gaatttggac	aacgaaatag	acaatggact	180
ccatcccact	gaggacccca	cgccgtgcga	ctgcggtcag	gagcactcgg	aatgggacaa	240
gctcttcate	atgctggaga	actcgcagat	gagagagcgc	atgctgctgc	aagccacgga	300
cgactgcctg	cgggcgagcg	tgcagaggct	gcgggaggag	ctgggcccgc	tcgcggaaag	360
cctggcgagg	ccgtgcgcgc	cgggggctcc	cgagaggccc	aggctgacca	gtgctctgga	420
cgagctgctg	caggcgaccc	gcgacgcggg	ccgcaggctg	gcgcgtatgg	agggcgcgga	480
ggcgcgagcg	ccagaggagg	cggggcgcgc	cctggccgcg	gtgctagagg	agctgcggca	540
gacgcgagcg	gacctgcacg	cggtgcaggg	ctgggctgcc	cggagctggc	tgccggcagg	600
ttgtgaaaca	gctattttat	tcccaatcgc	ttccaagaag	atttttggaa	cgctgcatcc	660
agtgaagacca	atgaggcttg	agtcttttag	tgcctgcatt	tgggtcaaa	ccacagatgt	720
attaaacaaa	accatcctgt	tttcttatgg	cacaaagagg	aatccatatg	aaatccagct	780
gtatctcagc	taccaatcca	tagtgtttgt	ggtgggtgga	gaggagaaca	aactggttgc	840
tgaagccatg	gtttccctgg	gaaggtggac	ccacctgtgc	ggcacttggg	attcacagga	900
agggctcaca	tcctttgtgg	taaatgggtg	actggcggct	accactgttg	agatggccac	960
aggtgcacatt	gttcctgagg	gaggaatcct	gcagattggc	caagaaaaga	atggctgtgt	1020
tgtgggtgggt	ggctttgatg	aaacatttagc	cttctctggg	agactccacg	gcttcaatat	1080
ctgggatagt	gttcttagca	atgaagagat	aagagagacc	ggaggagcag	agtcttgtca	1140
catccggggg	aatattgttg	ggtggggagt	cacagagatc	cagccacatg	gaggagctca	1200
gtatgtttca	taaatgttgt	gaaactccac	ttgaaagcaa	agaaaagaac	tcacacttaa	1260
aacacatgcc	agttgggaag	gtctgaaaac	tcagtgcata	ataggaaac	ttgagactaa	1320
tgaagagag	agttgagacc	aatctttatt	tgtactggcc	aaatactgaa	taaacagttg	1380
aaggaaaagc	attggaaaaa	gcttttgagg	ataatgttac	tagactttat	gccatgggtg	1440
tttcagttca	atgctgtgtc	tctgtcagat	aaactctcaa	ataattaaaa	aggactgtat	1500
tgttgaacag	agggacaatt	gttttacttt	tctttgggta	attttgtttt	ggccagagat	1560
gaattttaca	ttggaagaat	aacaaaaata	gatttgttgt	ccattgttca	ttgttattgg	1620
tatgtacctt	attacaaaaa	aatgatgaa	aacatattta	tactacaagg	tgacttaaca	1680
actataaatg	tagtttatgt	gttataatcg	aatgtcacgt	ttttgagaag	atagtcatat	1740
aagtatatatt	gcaaaaggga	tttgtattaa	tttaagacta	tttttgtaaa	gctctactgt	1800
aaataaaaata	ttttataaaa	ctaaaaaaaa	aaaaaaa			1837

<210> 11
 <211> 8923
 <212> DNA
 <213> Homo sapiens

<400> 11						
agctcacagc	tattgtgggt	ggaaaaggag	ggtggttgggt	ggatgtcaca	gcttgggctt	60
tatctcccc	agcagtgggg	actccacagc	ccctgggcta	cataacagca	agacagctccg	120
gagctgtagc	agacctgatt	gagcctttgc	agcagctgag	agcatggcct	aggggtggcg	180
gcaccattgt	ccagcagctg	agtttccag	ggaccttgga	gatagccgca	gcctcatttt	240
gcaggggaag	gcaccattgt	ccagcagctg	agtttccag	ggaccttgga	gatagccgca	300
gcctcatttt	atgattcctg	ccagatttgc	cggggtgctg	cttgctctgc	ccctcatttt	360
gccagggacc	ctttgtgcag	aaggaaactg	cggcaggcta	tcacagccgc	gatgcagcct	420
tttcggaagt	gacttcgtca	acacctttga	tgggagcatg	tacagctttg	cgggatactg	480
cagttacctc	ctggcagggg	gctgccagaa	acgctccttc	tcgattattg	ggcacttcca	540
gaatggcaag	agagtgagcc	tctcgtgtga	tcttggggaa	ttttttgaca	tggattttgt	600
tgtaaatggt	accgtgacac	aggggggacca	aagagtctcc	atgcctcatg	cctccaaagg	660

gctgtatcta	gaaactgagg	ctgggtacta	caagctgtcc	ggtgaggcct	atggctttgt	720
ggccaggatc	gatggcagcg	gcaactttca	agtcctgctg	tcagacagat	acttcaacaa	780
gacctgcggc	ctgtgtggca	actttaacat	ctttgtctgaa	gatgacttta	tgaccaaga	840
agggaccttg	acctcgagcc	cttatgactt	tgccaactca	tgggctctga	gcagtggaga	900
acagtgggtg	gaacgggcat	ctctctccag	cagctcatgc	aacatctcct	ctgggggaaat	960
gcagaagggc	ctgtggggagc	agtcggcagct	cttgaagagc	acctcggtgt	ttgcccgctg	1020
ccaccctctg	gtggaccctcg	agccttttgt	ggcctctgtg	gagaagactt	tgtgtgagtgtg	1080
tgctgggggg	ctggagtgcg	cctgccctgc	ctcctggag	tacgcgccga	ctgtgtccca	1140
ggagggaatg	gtgctgtacg	gctggaccga	ccacagcgcg	tcgagcccg	tgctgccctgc	1200
tggtatggag	tataggcag	gtgtgtcccc	ttgcgccagg	acctgccaga	gcctgcacat	1260
caatgaaatg	tgctcaggagc	gatgcgtgga	tggtctgcagc	tgccctgagg	gacagctcct	1320
ggatgaaggc	ctctgcgtgg	agagcaccga	gtgtcctctgc	gtgcattccg	gaaagcgcta	1380
ccctcccgcc	acctccctct	ctcgagactg	caacacctgc	atttgccgaa	acagccagtg	1440
gatctgcagc	aatgaagaat	gtccagggga	gtgccttgtc	actggccaat	cccactcaa	1500
gagctttgac	aacagatact	tcacctctcag	tgggatctgc	cagtaacctgc	tggcccgagg	1560
ttgccaggag	cactccctct	ccattgtcat	tgagactgtc	cagtggtgtc	atgacccgga	1620
cgctgtgtgc	acccgtctcc	tgaccgtctgc	gctgcctggc	ctgcacaa	cgttgtgaa	1680
actgaagcat	ggggcaggag	ttgccatgga	tggccaggac	atccagctcc	ccctcctgaa	1740
aggtagacct	gcactccagc	atacagtgac	ggcctccgtg	cgctcagct	acggggagga	1800
cctgcagatg	gactgggatg	gcccggggag	gctgctgggt	aaagtgtccc	ccgtctacgc	1860
cggggaagacc	tgcggcctgt	gtgggaatta	caatggcaac	cagggcgagc	acttccctac	1920
ccctctgggg	ctggcagagc	ggactctggg	aaacgctgga	agctgcacgg	ccggcgacgg	1980
ggactgccag	gacctgcaga	agcagcacag	cgatccctgc	gcctcaacc	cgcgcatgac	2040
caggttctcc	gaggaggcgt	gcgcggctct	gacgtcccc	acattcgagg	cctgccatcg	2100
tgccgtcagc	ccgtgcccct	acctgcggaa	ctgcgcgtac	gacgtgtgct	ctgtctcggg	2160
cgccgcgcag	tgccctgtgcg	gcgcocctggc	cagctatgcc	cgccgctcgc	cggggagagg	2220
cgctgcgcgt	gcgtggcgcc	agccaggccg	ctgtgagctg	aaactgccga	aaagccaggt	2280
gtacctgcag	tgccgggaccc	cctgcaacct	gacctgcgcg	tctctctctt	accgggatga	2340
ggaatgcaat	gaggcctgc	tggagggtctg	cttctgcccc	ccaggcctct	acatggatga	2400
gagggggggac	tgctgtccca	agggccagtg	ccctctgtac	tatgacgggt	agactctcca	2460
gcagaagac	atcttctcag	accatcacac	catgtgctac	tgtgaggatg	gcttcatgca	2520
ctgtaccatg	agtggaagtc	ccggaagctt	gctgctctgac	gctgtctctca	gcagctccct	2580
gtctcatcgc	agcaaaaagg	gcctatcctg	tcggcccccc	atggtcaagc	tggtgtgtcc	2640
cgctgacaac	ctgcgggctg	aagggtctga	gtgtaccaaa	acgtgccaga	actatgacct	2700
ggagtgcact	agcatgggct	ctgtctctgg	ctgcctctgc	cccccgggca	tggtccggca	2760
tgagaacaga	tgtgtggccc	tggaaagggt	tcctgtcttc	catcagggca	aggagtatgc	2820
ccctggagaa	acagtgaaga	ttggctgcga	cacttgtgtc	tgtcgggacc	ggaagtggaa	2880
ctgcacagac	catgtgtgtg	atgcacagtg	ctccacgatc	ggcatggccc	actacctcac	2940
cttcgacggg	ctcaaatacc	tgttcccccg	ggagtgccag	tacgttctgg	tgacaggatta	3000
ctcgggcag	aaccttggga	cctttcggt	cctagtgggg	aataagggat	gcagccaccc	3060
ctcagtgaaa	tgaagaana	gggtccacct	cctgggtggag	ggaggagaga	ttgactgtgt	3120
tgacggggag	gtgaatgtga	agaggcccat	gaaggatgag	actcactctg	agggtgtgga	3180
gtctggccgg	tacatcttcc	ctgtctggg	caaagccctc	tccgtggtct	gggacccgca	3240
cctgagcatc	tccgtggtcc	tgaagcagac	ataccaggag	aaagtgtgtg	gcctgtgttg	3300
gaattttttg	ggcatccaga	acaatgacct	caccagcagc	aaactccaag	tggagggaaga	3360
ccctgtggac	tttgggaact	cttggaagt	gagctctcag	tgtgtgcaga	ccagaaaaag	3420
gcctctggac	tcatccccctg	ccacctgcc	taacaacatc	atgaagcaga	cgatggtgga	3480
ttctctctgt	agaatcttta	ccagtgcagt	cttcacaggac	tgaacaagc	tggtggaccc	3540
cgagcatat	ctggaatgtc	gcttatcaga	cacctgtctc	tgtgagtcca	ttggggactg	3600
cgctgtcttc	tgcgacacca	ttgtgcctta	tgcccacgtg	tgtgccagc	atggcaaggt	3660
ggtgacctgg	aggacgtgga	cattgtgcc	ccagagctgc	gaggagagga	atctccggga	3720
gaacgggtat	gagtgtgagt	ggcgctataa	cagctgtgca	cctgctgtgc	aagtcaactg	3780
tcagcacctc	gagcactgtg	cctgcctctg	gcagtgtgtg	gagggctgcc	atgcccactg	3840
ccctccaggg	aaaaatcctg	atgagctttt	gcagacctgc	gttgacctgc	agactgtcc	3900
agtgtgtgag	gtggctggcc	ggcgttttgc	ctcaggaaag	aaagtcaact	tgaatccag	3960
tgaccctgc	cactgccaga	tttgccactg	tgatgtgtgc	aaactcaact	gtgaagcctg	4020
ccaggagccg	ggaggcctgg	tggtgcctcc	ccagatgcc	ccggtgagcc	ccaccactct	4080
gtatgtggag	gacatctcgg	aaccgcggtt	gcacgatctt	tactgcagca	ggctactgga	4140
ctctgtcttc	gctctggatg	gctctccag	gctgtccgag	gctgagtgtt	aaagtctgaa	4200
ggccttttgt	gtggaca tga	tggagcggtc	gcgcactctc	cagaagtggt	tcgcgtggc	4260
cgtggtggag	taccacgagc	gctcccacgc	ctacatcggt	ctcaaggacc	ggaagcgacc	4320

gtcagagctg	cggcgcatcg	ccagccaggt	gaagtatgcg	ggcagccagg	tggcctccac	4380
cagcgaggct	ttgaaataca	cactgttcca	aatcttcagc	aagatcgacc	ccctggaagc	4440
ctcccgatc	gcctcgctcc	tgatggccag	ccaggagccc	caacggatgt	gcccgaaact	4500
tgcccgctac	gtccagggcc	tgaagaagaa	gaaggctcatt	gtgatcccgg	tgggcatgtg	4560
gccccatgcc	aaacctcaagc	agatccgcct	catcgagaag	caggccccctg	agaaacaaggc	4620
cttcgtgctg	acgagtggtg	atgagctgga	gcagcaaaag	gacgagatcg	ttagctacct	4680
ctgtgacctt	gccccgtgaag	ccccctctcc	tactctgccc	ccccacatgg	cacaagtcaac	4740
tgtgtggccg	gggctcttgg	gggtttcgac	cctggggccc	aagaggaaact	ccatgggtct	4800
ggatgtggcg	tgtgctctgg	aaggatcgga	caaaattggg	gaagccgact	tcaacaggag	4860
caaggagttc	atggaggagg	tgattcagcg	gatggatgtg	ggccaggaca	gcattccacgt	4920
cacggtgctg	cagtaactct	acatggtgac	cgtggagtac	cccttcagcg	aggcacagtc	4980
caaaagggac	atcctgcagc	gggtgctgga	gatccgctac	cagggcggca	acaggaccaa	5040
cactgggctg	gcccctgcgt	acctctctga	ccacagcttc	ttggctcagcc	aggggtgacg	5100
ggagcaggcg	cccaacctgg	tctacatggt	caccggaaat	cctgcctctg	atgagatcaa	5160
gaggctgcct	ggagacatcc	aggtggtgcc	catttggagt	ggccctaatt	ccaacgtgca	5220
ggagctggag	aggattggct	gggccaatgc	ccctatcctc	atccaggact	ttgagacgct	5280
cccccgagag	gtccttgacc	tggtgctgca	gaggtgctgc	tccggagagg	ggctcgagat	5340
ccccaccctc	tccccctgac	ctgactgcag	ccagccccctg	gacgtgatcc	tctcctcgga	5400
tggctcctcc	agtttcccag	ctctctattt	tgatgaaatg	aagagttttc	caaggctctt	5460
cattttcaaaa	gccaatatag	ggcctcgtct	cactcagggt	tcagtgtctgc	agtatggaag	5520
catcaccacc	attgacgtgc	catggaaact	ggtcccggag	aaagcccat	tgctgagcct	5580
tgtggacgtc	atgcagcggg	agggagcccc	cagccaaatc	gggggtgctc	tgggctttgc	5640
tgctgcgatac	ttgacttcag	aaatgcattg	tgccaggccg	ggagcctcaa	aggcgggtgt	5700
catcctggct	acggacgtct	ctgtggattc	agtggatgca	gcagctgatg	cgcgcaggct	5760
caacagagtg	acagtgttcc	ctattggaat	tgagatcgcc	tacgattgcg	cccagctacg	5820
gatcttggca	ggcccagcag	gcgactccaa	cgtggtgaa	ctccagcgaa	tccaagacct	5880
ccctaccatg	gtcaccttgg	gcaattcctt	cctccacaaa	ctgtgctctg	gatttgttag	5940
gattttgcatt	gatgaggatg	ggaaatgagaa	gaggccgggg	gacgtctcgga	ccttgccaga	6000
ccagtgccac	accgtgactt	gccagccaga	tgccagagacc	ttgtgaaaga	gtcactcgggt	6060
caactgtgac	cggggctgga	ggcctctgtg	ccctaacagc	cagtcctccg	ttaaaagtga	6120
agagacctgt	ggctgccgct	ggacctgccc	ctgcgtgtgc	acaggcagct	ccactcgcca	6180
catcgtgacc	tttgatgggg	agaatttcaa	gctgactggc	agctgttctt	atgctctatt	6240
tcaaaaacaag	gagcagagcc	tggaagtgct	tctccataat	gggtgctcgca	gcctctggagc	6300
aaggcagggc	tgcatgaaat	ccatcgagg	gaagcacagt	gcccctctcg	tcgagctgca	6360
cagtgcacat	gaggtgacg	tgaattggag	actggtctct	gttctctacg	tgggtgggaa	6420
catggaagtc	aacgtttatg	tgccatcat	gcatgaggtc	agattcaatc	actttggtca	6480
catcttcaca	ttoactcca	aaaacaatga	gttccaaact	cagctcagcc	ccaagacttt	6540
tgcttcaaa	acgtatggto	tgtgtgggat	ctgtgatgag	aacggagcca	atgacttcat	6600
gctgagggat	ggcacagtca	ccacagactg	gaaaacactt	gttcagggaat	ggactgtgca	6660
gcggccagg	cagacgtgcc	agcccatcct	ggaggagcag	tgtcttgtcc	ccgacagctc	6720
ccactgccag	gtctcctct	taccactggt	tgctgaaatg	cacaaggctc	tggctccagc	6780
cacattctat	gcccacttgc	agcaggacag	ttgccaccag	gagcgaagtgt	gtgagggtgat	6840
cgctctttat	gcccacctct	gtcggaccaa	cggggtctgc	gttgactgga	ggacacctga	6900
ttctctgtct	atgtcatgcc	caccactctc	ggctctacaac	cactgtgagc	atggctgtcc	6960
cgggcactgt	gatggcaacg	tgagctcctg	tggggaccaa	ccctccgaag	gctgtttctg	7020
ccctccagat	aaagtcatgt	tggaaggcag	ctgtgtccct	gaagaggcct	gcaactcagt	7080
cattgtgtgag	gatggagtcc	agcaccagtt	cctggaagcc	tgggtcccgg	accaccagcc	7140
ctgtcagatc	tgcacatgcc	tcagcggggc	gaagggtcaac	tgcacaaagc	agcccttgccc	7200
cacggccaaa	gctcccacgt	gtggcctgtg	tgaagttagcc	cgcctccgcc	agaaatgcaga	7260
cagctgctgc	cccagtagta	agtgctgtgt	tgaccacagt	agctgtgacc	tgccccaggt	7320
gcctcactgt	gaacgtggcc	tcagcccaac	actgaccaac	cctggcgagct	gcagacccaa	7380
cttcacctgc	gcctgcagga	aggaggagt	caaaagagt	tccccaccct	cctgcccccc	7440
gcaccgtttt	ccacaccttc	ggaagaccac	gtgctgtgat	gagtatgagt	gtgctgcaa	7500
ctgtgtcaca	tccacagtga	gtgtccccct	tgggtacttt	gcctcaaccg	caccaactga	7560
ctgtgtgctg	accacaacca	cctgccttcc	cgacaagggt	tgtgtccacc	gaagcaccat	7620
ctaccctgtg	ggccagttct	gggaggagg	ctgcgatgtg	tgcacctgca	ccgacatgga	7680
ggatgcccgt	atgggctccc	gctggcccca	gtgctcccag	aagcctgtgt	aggacagctg	7740
tcgggtcggg	ttaacttacg	ttctgcatga	aggcgagtgc	tgtggaaggt	gcctgccatc	7800
tgctctgtgag	tgtgtgactg	gctcaccgct	gggggactcc	cagttcttct	ggaagagtgt	7860
cggctcccag	tgggctccc	cggagaaccc	ctgcctcacc	aatgagtgtg	tccgagtga	7920
ggaggaggtc	tctatacaac	aaaggaaact	ctcctgcccc	cagctggagg	tcctgtctgt	7980

ccccctggggc	tttcagctga	gctgtaagac	ctcagcgtgc	tgcccaagct	gtcgcgtgtga	8040
gcgcgatggag	gocctgcattg	tcaatggcac	tgctcattggg	cccggggaaga	ctgtgatgat	8100
cgatgtgtgc	acgaacctgcc	gctgcatggt	gcagggtgggg	gtcatctctgt	gattccaagct	8160
ggagtgagg	aagaccacct	gcaacccctg	ccccctgggt	tacaaggaag	aaaataacac	8220
aggtgaatgt	tgtgggagat	gtttgacctac	ggcttgacc	attcagctaa	gaggaggaca	8280
gatcatgaca	ctgaagcgtg	atcgagcgt	ccaggatggc	tgtgatactc	acttctgcaa	8340
ggtaaatgag	agaggagagt	acttctggga	gaagagggtc	acaggctgcc	caccctttga	8400
tgaacacaag	tgctctggct	agggaggtaa	aattatgaaa	attccaggca	ctcgtctgtga	8460
cacatgtgag	gagcctgagt	gcaacgacat	cactgccagg	ctgcagtatg	tcaagggtggg	8520
aagctgttaag	tctgaagtag	aggtggatat	ccactactgc	caggggcaaat	gtgccagcaa	8580
agccatgtac	tccattgaca	tcaacgatgt	gcaggaccag	tgctcctgct	gctctccgac	8640
acggacggag	cccattgcagg	tgcccttgca	ctgcaccaat	ggctctgttg	tgtaccatga	8700
ggttctcaat	gccatggagt	gcaaatgtct	ccccagggaag	tgacgcaagt	gagggtcgtct	8760
cagctgcatg	ggctcctgct	gctgctgtcc	ttggcctgat	ggccaggcca	gagtgctgcc	8820
agtcctctgc	atgttctgct	cttgctgcc	tctgagccca	caataaaggc	tgagctctta	8880
tcttgctgca	tggttctgct	ttgtgacct	ctgagccac	aat		8923

<210> 12
 <211> 6816
 <212> DNA
 <213> Homo sapiens

<400> 12						
gaacgctcac	agaacaggca	gtgcaattcc	atgttctctt	taagtatggt	agccctaccg	60
ggagctgagc	tggccagtct	acttgagag	gaaaagtaga	tctggggaag	gtggaaggg	120
cagttcctcaa	gtgaacttct	cctcggggat	ggtaagggca	tttgctgctg	tccagtgact	180
gctctggtgc	tcatgtgtcag	actcggtgt	ctcactccca	gatacttgat	tttgcaaaaa	240
gggacacacc	tatctgcagc	aaagaagaca	ctgaccagat	tgcgagcgg	gcttttggt	300
ctctctgtagc	caccggggg	ccaggaggac	tgactcggca	gcaggatctg	tgcattggaa	360
tgcggagacca	tggcagctga	gctgtgtccc	gactcagctc	tccgctctgt	gatgatgacg	420
gagggcgccg	gatgtcaagt	acatcttctt	gatgacagga	agctggaact	cctagtacag	480
cccaagctgt	tggccaagga	gcttctgag	cttggtggtt	ctcactcaa	ctgaaggaa	540
aaggagtagt	ttggaatagc	attcacagat	gaaaacgggac	acttaaaactg	gcttcaagct	600
gatcgaagag	tatttgaaaca	tgacttccct	aaaaagtcag	gacccgtggt	tttatacttt	660
tggttcagggt	tctatataga	aagcatttca	tacctgaagg	ataatgtac	cattgagctt	720
ttctttctga	acgcgaagtc	ctgcactctac	aaggagctta	ttgacgttga	cagcgaagt	780
gtgtttgaa	tagcttctcta	tattttacag	gaggcaaaag	gagatttttc	tagcaatgaa	840
gttgtgagga	gtgacttgaa	gaagctgcca	gcccttccca	cccaagccct	gaaggagcac	900
ccttccctgg	cctactgtga	agacagagtc	attgagcact	acaagaaact	gaacggtcag	960
acaagaggtc	aagcaatcgt	aaactacatg	agcatcgtg	agtctctccc	aacctacggg	1020
gttcactatt	atgcagtgaa	ggacaagcag	ggcataccat	gggtggctggg	cctgagctcg	1080
aaagggatct	tccagtatga	ctaccatgat	aaagtgaagc	caagaaagat	attccaatgg	1140
agacagttgg	aaaacctgta	cttcagagaa	aagaagtgtt	ccgtggaagt	tcatgacca	1200
cgacagggtt	cagtgacaag	gaggacgttt	gggcacagcg	gcattgcaag	gcacacgtgg	1260
tatgcattgtc	cgccattgat	caagtccatc	tgggctatgg	ccataagcca	acaccagttc	1320
tatctggaca	gaaagcagag	taagtccaaa	atccatgcag	cacgcagcct	gagtgagatc	1380
gccatcgacc	tgaccgagac	ggggcagctg	aagacctcga	agctggccaa	catgggtagc	1440
aagggggaaga	tcatcagcgg	cagcagcgcc	agcctgctgt	cttcaggttc	tcaggaaatca	1500
gatagctcgc	agtgcggcaa	gaaggacatg	ctggctgcct	tgaagtccag	gcaggaagct	1560
ctggaggaaa	ccctgcgtca	gaggtctggag	gaactgaaga	agctgtgtct	ccgagaagct	1620
gagctcacgg	gcaagctgcc	agtgaatat	ccctggatc	caggggagga	accacccatt	1680
gttcggagaa	gaataggaa	agccttcaaa	ctggatgaac	agaaaatcct	gccccaaagg	1740
gaggaaagctg	agctggaacg	cctggaacga	gagtttgcca	ttcagtccca	gattaccggg	1800
gcgcgccggc	gacctgacag	tgaccccaac	gtcagcaaaa	aactgaagaa	acaaaaggaaa	1860
acctcgatc	tgaatgcact	gaagaaactg	caggagattg	aaaatgcaat	caatgagaac	1920
cgcatcgaag	ctgggaagaa	agggcttcgc	tgatcctaga	cgatggaac	gcaactatca	1980
atggccagtg	aagacagctc	cctctcagat	gcccttgctc	tgaggatga	agactctcag	2040
gttaccagca	caatatcccc	cctcacattct	cctcacagg	gactccctcc	tgccgcaccg	2100
tcgcacaaca	ggcctcctcc	tcccagctcc	ctggaggagc	tccgacagag	gcactatcac	2160
cgcaacgact	atgacaagtc	accatcaag	cccaaaatgt	ggagtgaagc	ctctttagat	2220
gaacctatg	agaaggtcaa	gaagcgctcc	tctcacagcc	attccagcag	ccacaagcgc	2280

ttccccagca	caggaagctg	tgcggaagcc	ggcggaggaa	gcaactcctt	gcagaacagc	2340
cccacccgcg	gcctcccgcg	ctggaaactcc	cagtcacagca	tgcgctccac	gccagacctg	2400
cgggtcccga	gtccccacta	cgtccaattcc	acgaggtcgg	tggacatcag	ccccaccctg	2460
ctgcacagcc	tgcgactgca	ctttagggcac	cggagctcca	gcctggagtc	ccaggggcaag	2520
ctctctgggt	cggaaaaacga	caccggggagc	cccgaattct	acaccccgcg	gactcgtagc	2580
agcaacggct	cagaccccct	ggacgaactgc	togtctgca	ccagccaact	gagctcggag	2640
cactactacc	cggcgagat	gaacgccaac	tactccacgc	tggcggagga	ctcgcgctcc	2700
aaggcgcgca	agaggcgag	gcagcggcag	cggggcgcg	gcgactggg	ctcagccagc	2760
tgcggcagca	tgcccaaact	ggcggcgcg	gggggtgcg	ggggcgcg	ggggcgcg	2820
ggcggtgtgt	acctgcacag	ccagagccag	cccagctcgc	agtaccgcat	caaggagtag	2880
ccgctgtaca	tcgagggcgg	cgccacgccc	gtgggtgtgc	gcagcctgga	gagcgaccag	2940
gagtgccact	acagcgtcaa	ggctcagttc	aagacgtcca	actcctacac	ggcgggcggc	3000
ctgttcaagg	agagctggcg	cggcgggcg	ggcgacgagg	gcgacacggg	ccgcctgacg	3060
ccgtcgcgat	cgcagatcct	gcggactcgc	tgcgtggg	gcgagggcgc	ccacgacaag	3120
ggcgcgggcc	gtgccgctg	ctcagacgag	ctgcgccagt	ggtagccagc	ttccaccgcc	3180
tcgcacaagg	agcacagcgc	cctgtgcgac	accagctcca	cctcctcgga	cagcgctcgc	3240
cagtagacga	cctcctccca	gagcaccttc	gtggcgacac	gcagggtcac	caggatgccc	3300
cagatgtgca	agggccagct	agctgcctta	cctcaaagcc	agagaacctc	gacacgctca	3360
agtgaatttg	gagccacccc	ccccacgagc	ccccaccaca	tcctaaagct	gcagactgga	3420
gaagcaacag	aaaactcacc	cattctggat	gggtctgagt	ctccacctca	ccaaagtact	3480
gatgaataga	ggagctacaa	tgatagctgt	ttcctggatt	ctccctctca	tcacagaacta	3540
gctgatgtcc	agtggtagcg	gcaggaaaaa	gccaaagccg	ggacctcgtg	gtgagccagc	3600
ccggcctaata	ctgaccgcct	caacgccatt	ctgagatcac	ctcactgcct	ctcatttgcc	3660
ttaccagagc	gacccgtcac	cctgcaccag	ctttggccct	cagcactttt	ttctcctgt	3720
ctccgcattc	cctccccctt	gaaaacctga	ctgaggagac	attctggaag	gttccggtcc	3780
cactgtgtgt	cccttggcgc	ctctgcccac	agagagccag	acaccaatcc	tcaattggac	3840
cttgggtgct	tcctctggcc	atgacagccc	ctaggccagg	aacctcagg	ggggccagcc	3900
ggcatccaat	tctctgggat	aagtagcgtt	gggagagaa	gggaaagggg	acttgggtta	3960
cagggtgacc	cgaaaagacg	attcagctgt	gtccagcctg	ccaccatcac	gtaggccaac	4020
caagcacttc	atgaagagga	ggcctcgtgg	catattcagt	ttacacctga	aabatctcct	4080
gatgggacag	ctctgtggga	tggctatggg	ggaaggggag	gtgagaaag	gaagtctcgc	4140
acaccagaaa	tgcacgcgag	gaccacaatc	agttctatgc	tgccaaaagt	taaaaataaa	4200
taaaaacata	aaaaattaag	aggggccaa	aggaagacat	tctttctgca	aggaatttcc	4260
tttttaattc	gttaactgcta	ctacacacaa	gtgaaagtca	accctatgta	aactgggtgc	4320
ctctctctag	ccctctccct	tactggccca	cttctctctc	ctgagagagc	gtgaaaaact	4380
gccccaatgc	cacggtaaa	gggaggaagt	cttggctggc	gttgctgact	cacagtcgcc	4440
atccatctgg	acacaaagag	agacctgtgg	gagtcataga	gggtactgtt	agccccggtc	4500
catgcagggg	gttcagccga	gcccaagact	caaagctgct	ttccttccag	gatttgtagt	4560
aacgtaaagg	gataatggcc	aaaagtggtt	ctctctcatt	aaaccaacca	gtaaaaagct	4620
atcctatttt	tttgcataag	gtgtttcatt	ttcgttttta	tgggaaaacca	agggtaaaagc	4680
acattgcgat	ccattcagtg	tttaactgtc	gtggctcatt	ttctgttcgt	tagcacttgt	4740
gtgacaaaag	agctcagatc	cgacttctcc	tatgtgtcac	ttattccaag	aacccaacta	4800
tgcccttagg	tagaaaagatt	tgactcgtgt	gtctactagc	caacaggcag	agcagggttg	4860
aaaaaaaaat	cagctcccaa	agggcccatg	tgtctacatc	atcagttact	gtcatgcacc	4920
acatttgtgt	gcagatagca	aaagaggagg	aaagaagaaa	aaaattaatg	tgtgggagct	4980
gcacgtttac	atgtttttac	ctatgcttca	aacacaactg	gaagccatcc	aattctccaa	5040
ggcctcaaaa	atacttttat	agtaacaaag	gcacgacttt	agttgggtta	ttcaagatgg	5100
cacaaaaaag	tttccgagca	ggtggtatgc	gtgtcttttg	gcgcaagtg	tggggggatg	5160
gggggtgggg	tggaaatttt	ttctcactct	aatgacttcc	tattggaaag	gcattgacag	5220
ccaggggacg	gagccagggg	gggggtagtt	ttgtgggaaa	gcagaactga	agttagctta	5280
agcataaaaa	caaaagaaaa	tcttcgcttt	tcatgtatgt	ggaaatccag	aataaccata	5340
ggctctacca	gcacaggagg	gtaaggatgg	acactaaaa	gaaacacata	ccaaggtatt	5400
ccttctgctg	cagcctggag	accaccgaga	gtcgagctgg	ggcacacaca	caoctggcgc	5460
ggaccggcca	gggacaaggc	gggcccgtgc	ctcctccacc	aagtcctctc	agacaaattca	5520
gggctctgct	tcccccagctc	catgcatggc	tggaactggg	attccagggg	gcagaaggga	5580
ttcatattcc	cagaacgctt	taaggtgaca	cctgcaggat	aaagagatac	gctgtacatt	5640
atataatgat	tctagggatt	cactggggga	tatttttggt	gcttttactt	tcatggttag	5700
agctacaaga	aacagtgatt	tttttttttt	ctcccttccc	cattcagaaa	cattatacat	5760
tgggccaatt	ttcttttctc	caaaagaagt	ctaggtgata	tcagactgaa	ctgtgtgcaa	5820
caggaagaag	caaaaggga	aaggcagctg	atgaggttac	atggttacat	gttctacatc	5880
atgcagagta	gcttgaatac	tagtctggag	aaaactggat	caagattcta	gcccactgga	5940

gttgcaggga	atgagagagca	aaaattctaa	agatttgggt	tatatatttca	acttggggga	6000
cagagagaaa	tggagagcag	gaattacagt	tccacaacac	atcatatgat	tctgtgtatc	6060
aagacagaga	taagtaaaaa	caggttttac	tgttttagctg	agttcagta	atacaaaaaa	6120
tacataaaac	gttagtctctt	tgagacttgc	atgattaatg	atcagttgtgg	tgggaaatga	6180
tgtagtattt	gtacacaagc	acttgc aaac	tctttattcc	tattttctta	aaacaaaaa	6240
aggtgaaata	cgaagtcctt	ggtctgatat	aaagccctca	tggattctct	cggatgcgta	6300
aaagaaattg	ctctgtttcag	ccagaagact	ggtgaaaaca	cattacatcg	actatgttgt	6360
gagccaggtt	gatttttttt	tttattatat	gcaggtgatg	gttgaaaact	ttaaaattcc	6420
aaactgtgtt	cattcagtat	tagtttagtt	ctaaattagt	caaaccccat	ccaggtgtcta	6480
tcagatgacc	agttactgct	tagttaacta	ggtgtaaagt	tttacatata	cattaatttc	6540
aaagtgttat	tacaagttgt	gtaaaattga	ctctagttta	ataattggggg	aaaaaagatt	6600
aggtgtctcc	tgaaactgac	tgttagagcat	gtaaaattgat	tttactggat	cttttgtcaac	6660
tgtaatcaat	gaaaaagatg	tacgttgttag	acaaagttgc	agaattaaaa	aaagaaattc	6720
gcttttaatt	tattcttttt	gtattaaaga	tttgtatagt	atcttttacat	tttgcaaaaa	6780
agtgctgtca	acacttatata	aaacattttc	aaaatg			6840

```
<210> 13
<211> 2280
<212> DNA
<213> Homo sapiens
```

cgcggggacat	gtctaaccc	ggaggccgga	ggaacggg	cgtcaagctg	cgccctgacag	60
tactctgtgc	aaaaaacctg	gtgaaaaagg	attttttccg	acctctcgat	ccattttgcta	120
agctggtgtg	tgatgagctt	gggcaatgcc	attctcacga	tactgtgaag	aatacgctgt	180
atccaaagtg	gaatcagcat	tatgcactgt	atattggaaa	gtctgattca	gttacgatca	240
gtgtattggaa	tcacaagaag	atccataaga	aacaaaggtg	tggattttct	gggttgtgtt	300
gtctcttttc	caatgcocat	aaccgcctca	aagacactgg	tattcacagg	tgtgatttat	360
gcaaacctcg	gccaaatgac	aatgatcacg	tttagaggaca	gatagttaga	agtccttcagt	420
ccagagaccg	atagggcaca	ggaggacaa	ttgtggactg	cagctgttta	ttgtataaag	480
atttaccaga	cggctgggaa	gaaaggagaa	ccgctcttgg	aagaatccag	tatctaaacc	540
atatacaaac	aactacgcaa	tggggagccg	caaacagcac	ggcatccgaa	tattctagcg	600
ctggcgacc	tcttgatctg	tttgttgatg	agaacactcc	aattagtgtg	acaaatgggt	660
caacatgtgg	acagttgtct	gatcccagcg	tggcagagag	gagagtcagg	tcacaacgac	720
atagaataat	catgacgaga	acacatttac	atactctctc	agacctacca	gaaggctatg	780
aacagaggac	acagccaacia	ggccagggtg	attcttcaca	tacacagact	ggtgtgaaga	840
catggcatga	tccaagatgg	ccaggggatc	ttagcaacat	caatgtgtaa	gagcttggtc	900
cgttgctctc	tggatgggag	atccgttaata	cggcacaacg	cagctgttat	ttcgttgacc	960
ataacaacag	acaacaacaa	tttaccagat	ctcggtctgc	tgcataactg	catttagttt	1020
taattcgcca	gaaccaacaa	aaagaccaac	agcaacagca	agtggttgat	ttatgtctct	1080
atgacacaga	atgcctgact	gtcccaagtg	acaaagcgaga	ctctgtctag	aaactaaaaa	1140
ttttcgcgca	agaacttttc	caacaacacg	ctcaggcagg	tcatttgcgc	attgaggttt	1200
ccagggaaga	gattttttgag	gaatcatatc	gacaggtcat	gaaaatgaga	ccaaaagatc	1260
ctctggaagc	ataatgatga	aaattttctg	gagaaagaag	ctctgactat	ggaggcgctg	1320
ccagggaagt	gttgatattct	ttgttcacatt	aaatgttgaa	tcctactact	ggcctctctc	1380
agctattcaag	agatgatatt	tatacatctg	agatcaatcc	tgattttgca	gttaattccg	1440
aacatttata	ctattttcac	tttgttgga	gaataattgg	aattgctgtg	tttcatggac	1500
atataattga	tgggtgtgtt	acattgcctt	tttataagca	attgttgctg	aagtaacata	1560
ccttggaatg	catggagbta	gtagatccga	attcttcacga	cagttttagt	tggatattct	1620
agaatgatat	tacaggtgtt	ttggcaccgt	ccttctgtgt	tgaacataat	gcataatggt	1680
aaattattcca	ctgcatgaact	aaaccaaatc	ggcaaatgat	ccgtgttaat	gaagaaaaat	1740
aaaaagaata	tgctcagctc	tatgtgaaat	gcagattttt	acgagcgatt	gaggtccaat	1800
tcttgctctc	gcagaaagga	tttaatgaag	taattccaca	acatctgctg	agacattttg	1860
atggaagaa	gttagagctc	attattttgt	gacttggaag	gatagatgtt	aatgactgga	1920
agtgaaacac	cgggtttaaaa	cactgttacac	gagcagcaca	cattgtcaaa	tggttttgga	1980
aagctgttga	gttttttgat	gaagagcgac	gagcaagatt	gcttcagttt	gtgacagcat	2040
cctctcgagt	gcctctgcag	ggcttccaa	catttgcagg	tgtctcagct	ccgagactgt	2100
ttaccatata	ccagattgat	gcctgcacta	acaacctgtc	gaaagcccac	acttgcctca	2160
atcgaataga	catccaccoc	tatgaaagct	atgaaagctg	atatgaaaag	ctgtccacag	2220
ccattgaaga	acaatctgtga	ttctgtgtgt	aatgacaagc	ttcaaagggt	taccagagct	2280

<210> 14
 <211> 928
 <212> DNA
 <213> Homo sapiens

<400> 14
 ctccactatg gacagagcct ccaactgagct gctgcctgcc cgccacatac ccagctgaca 60
 gggggcccgc agagccatgc agctgtgctg ggggtgacct ggggtctctc ctgttccgag 120
 gccacaactc ccagcccaca atgacccaga cctctagctc tcagggaggc cttggcggtc 180
 taagtctgac cacagagcca gtttcttcca acccaggata catcccttcc tcagaggcta 240
 acaggccaag ccactctgtc agcactggta ccccaggcgc aggtgtcccc agcagtggaa 300
 gagacggagg cacaagcaga gacacatttc aaactgttcc ccccaattca accaccatga 360
 gcctgagcat gagggaagat ggcaccatcc tgcccagccc cacgtcagag actgtgctca 420
 ctgtggctgc atttgggtgt atcagcttca ttgtcatcct ggtgggtgtg gtgatcatcc 480
 tagttgtgtg ggtcagcctg aggttcaagt gtcggaagag caaggagtct ggagatcccc 540
 agaaacctgg agagcgggag gagaagggtg gacataggag ggaacccctac ccctggaatt 600
 gacttggact ctgggtctgg aaacgcgaagt tcaaatctca cccatttgtt ccaggagggtt 660
 ctggctgatg aggaagaccc ttgtgggagg gggggccctg ccctccagtt agctcttctt 720
 ggctgtgtctg ggttccatgt tctcatgcag ggatggagtc ggggtggagag cccactcttg 780
 ctagggggcg gcaggctgag agctcacctg ttcagcagag aagtggaaact cactttgtct 840
 ctggagcctc cctacacagt acttatctgg gaagggaagt cgggactctt gttggccctt 900
 ttgtccccc gactggcccc cttcgcgc

<210> 15
 <211> 6699
 <212> DNA
 <213> Homo sapiens

<400> 15
 aaagccctca gccctttgtg cttctctctg gccggagtgg ctgcagctca cccctcagct 60
 ccccttgggg ccagctcggg agccagagata gaagctcctg tgcgcgctg gcttctcgct 120
 tcccgcagag gccacacagc agaccgggat ggcacacctc atgggctctg tgcgtctgct 180
 gctgtgctgc ctgaccacgc ccggggcgggg gacgggagct gacacggagg cgggtggtctg 240
 cgtggggacc gccctgtaca gggcccactc gggcaagctg agcgctgcc agggccagaa 300
 ccactgcaac cagaacgggg gcaacctggc cactgtgaag agcaaggagg agggccagca 360
 cgtccagcga gtactggccc agctcctgag gcgggaggca gccctgacgg cgaggatgag 420
 caagtctcgg attgggctcc agcgagagaa gggcaagtgc ctggacccta gtctgccgt 480
 gaagggtctc agctgggtgg gcggggggga ggcacgcct tactctaact ggcacaaggga 540
 gctccggaac tcgtgcactc ccaagcgctg ttgtctctct ctgctggacc tgtcccagcc 600
 gctccttccc aaccgctgc ccaagtgttc tgaggggccc tgtgggagcc caggctcccc 660
 cggaagtaac attgagggtc tcgtgtgcaa gttcagcttc aaaggcatgt gccggcctct 720
 ggccctgggg ggcccagggtc aggtgacctc caccaccccc ttccagacca ccagttctctc 780
 cttggaggct gtgccctttg cctctgcggc caatgtagcc tgtggggaag gtgacaaggga 840
 cgagactcag agtcattatt tctctgtcaa ggagaaggcc cccgatgtgt tcgactgggg 900
 caagctgggc cccctctgtg tcaagcccaa gtatggctgc aaactcaaca atgggggctg 960
 ccaccaggag tgcttttaag ggggggatgg ctcttctctc tgcggctgcc gaccaggatt 1020
 ccggctgctg gatgacctgg tgacctgtgc ctctcgaaac ccttgagctg ccagcccatg 1080
 tcgtgggggg gccacgtgcg tccctgggacc ccatgggaaa aactacacgt gccgtgccc 1140
 ccaagggtac cagctggact cgaactcagc ggaactgtgt gacgtggatg aatgccaggga 1200
 ctccccctgt gcccaggagt gtgtcaaac ccctgggggc ttccgctgag aatgctgggt 1260
 tggctatgag cgggggggtc ctgggaggag ggcctgtcag gatgtggatg agtgtgctct 1320
 ggggtcgctg ccttgcgccc agggctgcac caacacagat ggctcatttc actgtcctct 1380
 tgaggaggcg taagtctctg ccggggagga cgggactcag tgcaggagc tggatgagt 1440
 tgtggggccc gggggccccc tctgcgacag cttgtgcttc aacacacaag ggtccttcca 1500
 ctgtggctgc ctgccagggt ggggtgctgg cccaaatggg gtctcttgca ccatggggcc 1560
 tgtgtctctg ggaccaccat ctggggcccc cgatgaggag gacaaaggag agtaaaggag 1620
 gagcacctgt ccccgcgctg caacagccag tcccacaagg gggcccgagg gacccccaa 1680
 ggctacaccc accacaagta gccttctgct gtcacttgac gcccccatc catctgcccc 1740
 actcaagatg ctgggcccga gttgggtcctc agggctctgg agggagccca gcatccatca 1800
 gcgccacagt gccctctggc ccaggagacc tgcaggtggg gactcctcgg tggccacaca 1860
 aaacaacgat ggcactgacg ggcaaaagct gcttttatcc tacatccatg gaccgtggt 1920

ggccatccta	ctctctgctg	ccctggctct	ggggctactg	gtctatcgca	agcggagagc	1980
gaagagggag	gagaagaagg	agaagaagcc	ccagaatgcg	gcagacagatt	actcctgggt	2040
tcacagagca	gctgagagca	gggccatgga	gaaccagtac	agtcggacac	ctgggacaga	2100
ctgctgaaag	tgaggtggcc	ctagagacac	tagagtcacc	agccaccatc	ctcagagctt	2160
tgaactcccc	attccaaagg	ggcaccacaca	tttttttgaa	agactggact	ggaatccttag	2220
caacaatctg	taagctctct	cccttaaggc	cccttggaac	atgcaggtat	ttctcacggg	2280
tgtttgatgt	tcctggaagt	gaagctgtgt	gttggcgctg	cacgggtggg	atttcgtgac	2340
tctataatga	ttgttactcc	ccctcccttt	tcaaatcca	atgtgaccaa	ttccggatca	2400
gggtgtgagg	aggctggggc	taaggggctc	ccctgaatat	ctctctctgt	cacttccacc	2460
atctaagagg	aaaagggtgag	ttgctcatgc	tgatttaggat	tgaatgatt	tgtttctctt	2520
cctaggatga	aaactaaatc	aatttaattat	tcaattagggt	aagaagatct	ggttttttgg	2580
tcaaagggaa	catgttcgga	ctggaaacat	ttctttacat	ttgcattcct	ccatttcgcc	2640
agcacaaagt	ttgtctaaatg	tgatactggt	gacatccctc	agaatggcca	gaagtgcatt	2700
taacctctta	ggtggcaagg	aggcagggaag	tgccctcttta	gttctttacat	ttctaatagc	2760
cttgggttta	tttgcaaaag	aagcttgaaa	aatatgagaa	aagttgcttg	aagtgcatca	2820
caggtgtttg	tgaagtca	taactacagg	ggctagggcg	agagaggcca	gggatttgtt	2880
cacagatact	tgaattcaat	actccaaatg	tactgaggtt	accacacact	tgactacgga	2940
tgtgatcaac	actaacaagg	aaacaataatc	aaggacaacc	tgtctttgag	ccaggggcag	3000
cctcagacac	cctgcctgtg	gccccgcctc	cacttccatc	tgcccggaat	gcagtgctc	3060
cgagctcaga	cagaggaagc	cctcgagaaa	gttccatcag	gctgtttcct	aaaggatgtg	3120
tgaacgggag	atgatgcact	gtgttttgaa	agttgtcatt	ttaaagcatt	ttagcacagt	3180
tcatagtcca	cagttgatgc	agcatctga	gattttaaat	cctgaagtggt	ggttgccgca	3240
cacaccaagt	agggagctag	tcaggcagtt	tgcttaagga	acttttgttc	tctgtctctt	3300
ttccttaaaa	ttggggtaag	ggaggggaag	aagagggaaa	gagatgacta	actaaatca	3360
tttttacagc	aaaaactgct	caaagccatt	taaattatat	ctcatcttta	aaagtacat	3420
ttgcaaatat	ttctccctat	gataatgcag	tcgatagtgt	gcactcttct	ttctctctct	3480
ttctctctac	acacacacac	acacacacac	acacacacac	agagacacag	caccattctg	3540
cctggggcac	tggaacacat	tcctgggggt	caccgatggt	cagagtcact	agaagttacc	3600
tgagtatctc	tgaggaggct	ctgtctctct	gtgggctttt	taccaccaat	gtgcaggaga	3660
acagacagag	gaaatgtgtc	tcctcccaag	gccccaaagc	ctcagagaaa	gggtgtttct	3720
ggttttgctc	tagcaatgca	tcggtctctg	aggtgacact	ctggagtggt	tgaagggcca	3780
caaggtgcag	ggttaactct	cttgcagatt	ttgaaatata	gatgtcatgt	ttcagattgt	3840
ttttaataga	aaactaaagg	ggcaggggaa	gtgaaaggaa	agatggagggt	tttgtgcggc	3900
tcgatggggc	atttggaaat	ttcttttaaa	gtcatctcat	gggtctcaggt	tttcaggtgg	3960
aactctggtg	tttaacactt	aaggggagaca	aaggctgtgt	ccattttggca	aaactctctt	4020
ggccacgaga	ctctaggtga	tgtgtgaagc	tgggcagctc	gtggtgtgga	gagcagccat	4080
ctgtctggcc	attcagagga	ttctaaagac	atggctggat	gcgctgtctga	ccaacatcag	4140
cacttaataa	aatgcanaatg	caacattttct	ccctctgggc	cttgaanaatc	gtgcctcta	4200
tcattttggg	tgaaggagac	atttctgtcc	ttggcttccc	acagccccaa	cgcagctctgt	4260
gtatgatctc	tggaatccaa	cagccctccc	tattttcaca	gtgttctgat	tgctctcaca	4320
gcccaggccc	atcgtctggt	ctctgaatgc	agccctgttc	tcaacaacag	ggaggtcatg	4380
gaacccctct	gtggaaccca	caagggggaga	aatgggtgat	aaagaatcca	gttctccaaa	4440
accttccctg	gcaggctggg	tcctctctct	gctgggtggt	gctttctctt	gcacaccact	4500
cccaccacgg	ggggagagcc	agcaacccaa	ccagacagct	caggttgtgc	atctgatgga	4560
aaccactggg	ctcaaacacg	tgcttttatc	tcctgtttat	ttttgtctgt	actttgaagc	4620
atggaaattc	ttgtttgggg	gatcttgggg	ctacagtagt	gggttaacaa	atgcccaccg	4680
gccaaagggc	cattaacaaa	tcgtctctgt	cctgaggggc	cccagcttgc	ctggggcggtg	4740
cacagtgagg	aatccaaggg	tcacagtatg	gggagaggtg	caccctgcac	ctcgctaact	4800
ttctcgctaga	cacagtggtt	ttgcccagggt	gacctgttca	gcagcagaa	aaagccagggc	4860
catggggagc	gggggaagttt	tcacttggag	atggacacca	agacaatgaa	gattttgtgt	4920
ccaatatagg	caataactct	gggagactct	tggaaaaaac	tgaatatatt	caggaccacac	4980
ttctctccctc	ccctcatccc	acatctcaaa	gcagacaatg	taaagagaga	acatctcaca	5040
caccagctc	gccatgecta	ctcatctctg	aatttcagggt	gccatcactg	ctctttcttt	5100
cttctttgtc	atttgagaaa	ggatgcagga	ggacaattcc	ctcagagtaat	ctggagaaatg	5160
cagaaaaacc	agggcaggac	agttatcgac	aatgcattag	aacttgtgtga	gcactctctgt	5220
tagagggact	ccaccctctc	tcacacagct	gccttccagg	caagaccaac	cacatcttgt	5280
ctctgccttc	ggtggccacc	acacctaaagc	gtcatctgca	ttgccatagc	atcatgatgc	5340
aacacatcta	cgtgtagcac	tacgacgtta	tgtttgggta	atgtggggat	gaactgcagt	5400
aggctctgat	taaggatgtg	gggaagctggg	ctgcggtcac	tgtcggcctt	gcaaggccac	5460
ctggaggcct	gtctgttagc	cagtggttga	ggagcaaggc	ttcaggaagg	gccagccaca	5520
tgcacatctc	cctgcgatca	ggcaaaaaag	tggattaaaa	aagtcaaaac	tttatatgca	5580

tgtgttatgt	ccatthttgca	ggatgaactg	agtttaaaag	aatttttttt	tctcttcaag	5640
ttgttttgtc	ttttccatcc	tcatacacaag	cccttggttg	agtgtcttat	ccctgagcaa	5700
ttgttcgatg	gatggagatg	atcattagg	acttttggtt	caacctttat	tctgttaaat	5760
atttctgtga	aaactaggag	aacagagatg	agatttgaca	aaaaaaaaatt	gaattaaaaa	5820
taacacagtc	tttttaaaac	taacatagga	aagcctttcc	tattattttct	cttcttagct	5880
tctccattgt	ctaaatcagg	aaaacaggaa	aacacagctt	tctagcagct	gcaaaatggg	5940
ttaatgcccc	ctacatatth	ccatcacctt	gaacaatagc	tttagcttgg	gaatctgaga	6000
tatgatccca	gaaaacatct	gtctctactt	cggtctgcaa	acccatgggt	taaatctata	6060
tggtttgtgc	atthttctcaa	ctaaaaatag	agatgataat	ccgaattctc	catatattca	6120
ctaatacaag	acactattht	catactagat	tctgagaca	aatactcact	gaagggtctg	6180
tttaaaaaa	aattgtgttt	tggtctgttc	ttgtagataa	tgcccttcta	ttttaggtag	6240
aagctctgga	atcccttht	tgtgtctgtg	ctcttatctg	caagggtggca	agcagttctt	6300
ttcagcagat	tttgcccact	atthctctga	gctgaagtgc	tttgcataga	tttggtctaa	6360
gcttgaatta	gatccctgca	aaggcttgct	ctgtgatgct	agatgtaatt	gtaaaatgca	6420
gtaatcactt	catgaatgct	aaatgagaat	gtaagtattt	ttaaatgtgt	gtatttcaaa	6480
tttgtttgac	taattctgga	attacaagat	ttctatgcag	gatttacctt	catcctgtgc	6540
atgtttccca	aactgtgagg	agggaaaggct	cagagatcga	gcttctcttc	tgagttctaa	6600
caaaatgggt	ctttgaggg	cagcctttag	gaagggtgag	ctttgtgtgc	ctttgagctt	6660
tctgttatgt	gcctatccta	ataaactctt	aaacacatt			6699

<210> 16
 <211> 7680
 <212> DNA
 <213> Homo sapiens

<400> 16						
gcggacactc	ctctcgcttc	ctccccggca	gcggcgccgg	ctcgagcgcg	gctccggggc	60
tcgggtgacg	cggccagcgg	gcctggcgcc	gaggattacc	cggggaagtg	gttgtctctc	120
ggctggagcc	gcgagacggg	cgctcagggc	gcggggccgg	cggcgccgaa	cgaagagcag	180
gactctggcg	gcggcgctgt	tgggcggggg	agcgccggca	ccggcgcgagc	agggccgctc	240
gcgctcacca	tggtcagcta	ctgggacacc	ggggctctgc	tgtgcgcgct	gctcagctgt	300
ctgcttctca	caggatctag	ttcaggttca	aaattaaaag	atcctgaact	gagtttaaaa	360
ggcacccagc	acatcatgca	agcagggcag	acactgcatc	tcctaactgc	gggggaagca	420
gcccataaat	ggctcttgcc	tgaaatcggt	agtaaggaaa	gcgaaagggt	gagcataact	480
aaactctgct	gtggaagaaa	tgggaaacaa	ttctgcagta	ctttaacctt	gaacacagct	540
caagcaaac	acactggctt	ctacagctgc	aaatatctag	ctgtacctac	ttcaaaagag	600
aaggaaacag	aatctgcaat	ctatatattt	attagtata	caggtagacc	ttctgtagag	660
atgtacagtg	aaatccccga	aattatacac	atgactgaag	gaaggagct	cgctattccc	720
tgccgggtta	cgctacacaa	catcactgtt	actttaaaaa	agtttccact	tgacactttg	780
atccctgatg	gaaaacgcat	aatctgggac	agtagaaaag	gcttcatcat	atcaaatgca	840
acgtacaag	aaatagggtc	tctgacctgt	gaagcaacag	tcaatgggca	tttgtataag	900
acaaactatc	tcacacatcg	acaaaaccaat	acaatcatag	atgtccaaat	aagcacacca	960
cgcccagtc	aattacttag	agggcatact	cttgtcctca	attgtactgc	taccactccc	1020
ttgaacacga	gagttcaaat	gacctggagt	tacctctgat	aaaaaaataa	gagagcttcc	1080
gtaaggcgac	gaattgacca	aagcaattcc	catgccaa	tattctacag	tgthcttact	1140
attgacaaaa	tgacagaaca	agacaaagga	ctttataact	gtcggtgaag	gagtggaaca	1200
tcactcaaat	ctgttaaac	ctcagtgcat	atatatgata	aagcatcact	cactgtgaaa	1260
catcgaaaa	agcaggtgct	tgaaaaccgta	gctggcaagc	gggtcctccg	gctctctatg	1320
aaagtgaagg	catttccctc	gccggaagtt	gtatgggtta	aagatgggtt	acctgcgact	1380
gagaaatctg	ctcgctattt	gactcgtggc	tactcgttaa	ttatcaagga	cgtaactgaa	1440
gaggatgcag	ggaaattatac	aatcttctgt	agcataaaa	agtcaaaatg	gtttaaaaac	1500
ctcactgcga	ctctaattgt	caatgtgaaa	cccagattt	acgaaaaagg	cgtgtcatcg	1560
tttccagacc	cggtctctca	ccactggggc	agcagacaaa	tctgactttg	taccgcatac	1620
ggatcccttc	aacctacaat	caagtgggtc	tggaaccctt	gtaaccgtaa	tcattccgaa	1680
gcaagggtgt	acttttggct	caataatgaa	gagtccttta	tcttgatgac	tgacagcaac	1740
atgggaaaca	gaatttgag	catcactcag	cgcattggca	taataagag	aaagaataag	1800
atggctagca	ccttggttgt	ggctgactct	agaatttctg	gaattacat	ttgcatagct	1860
tccaataaag	ttgggactgt	gggaagaaac	ataagctttt	atatcacaga	tgtgccaact	1920
gggtttcatg	ttaacttgga	aaaaatgccg	acggaaggag	aggactgtga	actgtcttgc	1980
acagttaaca	agttcttata	cagagacgtt	acttggattt	tactgcggac	agbtaataac	2040
agaacaatgc	actacagtat	tagcaagcaa	aaaatggcca	tactaagga	gcactccatc	2100

atccttaaatc	taccatcatat	gaatgtttcc	ctgaagatt	caggcaccta	tgctgcaga	2160
gccaggaatg	tatacacaagt	ggagaaatc	ctccagaaga	aagaanaat	atcacagat	2220
caggagacac	ctacactcct	gcgaacact	agtcatcaca	cagggtgccat	cagcagttcc	2280
accactttag	actgtcatcg	taatggtgtc	cccagccctc	agatcaactgt	gttttaaaac	2340
aaccacaaaa	tacaacaaga	gctgtggaat	atttatggac	caggaaagcag	cacgcctgttt	2400
attgaaagag	tacacagaaga	ggatgaaagt	gttctactct	cgaaagccac	accacagaag	2460
ggctctgtg	aaagtctcagc	atacctcact	gttcaaggaa	ctctggacaa	gtcttaactgt	2520
gagctgtatca	ctctcaactag	cacctgtgtg	ctgcgcactc	tctctggct	cctataaacc	2580
ctccttatcc	gaaaaatgaa	aaggctctct	tctgaaataa	agactgacta	cctatcaatt	2640
ataatggacc	cagatgaaagt	tctcttggat	gagcagtgat	agccgctccc	ttatgattgc	2700
agcaagtggg	actgttgcgc	ggagagactt	aaactgggca	aatcactgtg	aagagggtct	2760
tttggaanaag	tggttcaagc	atcacagtct	ggcattaaaga	aatcacctac	gtgcgcgact	2820
gtggctgtga	aaatgtctgaa	agaggggggc	acggccagcg	agtacaanaag	tctgatgact	2880
gagctaaaaa	ctcttgaccoca	catctggccac	catctgaacg	tggttaacct	gctgggagcc	2940
tgcaccagaa	aaggaggggcc	tctgactggt	atbtgtgaat	actgcaataa	tggaatctcc	3000
ctcaactacc	tcaagagcaa	actgtgacta	ttttttctca	acaaggatgc	agcactacac	3060
atggagccta	agaaaagaaa	aatggagcca	ggcctggaac	aaggcaagaa	accaagacta	3120
gatagcgtca	ccagcagcga	aagcttttgcg	agctccggct	tccagagaag	taaaagtctg	3180
agtatgtgtg	aggaaagcga	ggattctcag	ggtttctaca	aggagcccat	cactatggaa	3240
gatctgattt	cttaccagt	tcaagtggcc	agaggcactg	agtctcgtct	tccagaaag	3300
tgcatctcat	gggacctggc	agcgagaaac	attcttttat	ctgagaacaa	cgtggtagag	3360
atttgtgatt	tggccttgcg	ccgggatatt	tataagaacc	ccgatattgt	atgaaagaa	3420
gatactcgac	tctctctgaa	atggatggct	cccgaaatca	tctttgacaa	aatctcacgc	3480
accaagagcg	acgtgtgtgc	ttaacggagt	tctgctgggg	aaactcttct	cttaggtggg	3540
tctccatacc	caggagtaca	aatggatgag	gacttttgca	gtcgcctgag	ggaaggcatg	3600
aggatgaagc	ctctctgagta	ctctactctc	gaaactctac	agatcatgtg	ggactgtgtg	3660
ccagagagcc	tcaagaagct	gccaaagtgt	cagacaactg	tgaaaaaact	agtggtattg	3720
cttcaagcaa	atgtacaaca	ggatggttaa	gactacatct	caatcaatgc	catactgaca	3780
ggaaatagtg	ggtttacct	ctcaactctc	gccttctctg	aggacttctt	caagggaagt	3840
atttcagctc	cgaaagttaa	tccaggaagc	tctgatgatg	tcagatattg	aaatgctttc	3900
aagttctatg	gcctggaaag	aatcaaaaac	tttgaagaa	ttttaccgaa	tgccactctc	3960
atgtttgatg	actaccaggc	cgacagcagc	actctgttgg	ctctctccat	gtcgaagcgc	4020
ttcacctgga	ctgacagcaa	accacaaggc	tcgctcaaga	ttgacttgag	agtaaacagt	4080
aaaagttaag	agctcgggcg	ctctgatgtc	agcagggcca	gttcttgcaa	tctcagctgt	4140
gggcacgtca	gcgagagcaa	gcgcaggttc	acctacgacc	acgtctgagc	ggaaagaaag	4200
atcgctgtct	gtctcccggc	cccagactct	aactcgbtgc	tctctgactc	caccccaccc	4260
atctagagtt	tgacacgaag	ccttatctct	agaagcacat	gtgtatttat	acccccagga	4320
aactagctct	tgcagatatt	atgcataat	aagtttacac	ctttatcttt	ccatgggaga	4380
cagctgcctt	tgtgattatt	tttaatagt	cttttttttt	tgtactaaca	agaaatgaac	4440
ttccagatga	gaattatgta	caagtgaaga	acactactgc	taaatctcta	tgttactcag	4500
tgttagagaa	atccttctca	aaccaatga	cttcctgtct	ccaacccccc	ccacctcagg	4560
gcacgcagga	ccagtttgat	tgaggagctc	cactgatcac	ccaatgcate	acgtacccca	4620
ctggggccagc	ctctcagccc	aaaaccaggc	cgacaacggc	cgttatcccc	aggggatacc	4680
tgctgtggcct	gagcaaacct	tcgggagtcc	ctacgacggc	ctaagacatg	tgaggaggaa	4740
aaggaaaanaa	agcaaaaagc	aagggagaaa	agagaaaacc	ggagaaggca	tgagaaagaa	4800
tttgagacgc	accatgtggg	cacggagggg	gacggggctc	agcaatgcca	tctcagtggc	4860
ttccagctgc	tgacctctct	acattttgag	gcccagacag	gagcagatgag	acgacgatga	4920
ggggacattt	ctctgattct	gggagccaa	aaaaggacca	atatcttttt	tggaactaaa	4980
gcaaatttta	gaaccttaac	tatggaagtg	gttctatgtc	catctctatt	cgtggcatgt	5040
tttgtattgt	agcaactgag	gtggcactca	actctgacgc	cataactttg	gtcctctctg	5100
taagatgcac	tgaanaattta	gcagagatta	gggttctctc	agggcatgat	ggctctacac	5160
tgaanaattct	acattctatt	ttgggtatta	atataatgtc	cagacactta	actcaatttc	5220
tttgtattat	tctgtttttt	acagttagtt	gtgaaagaaa	ctcgagaaga	atgaaatgac	5280
agtctcgagg	agagttttct	ccatatcaaa	acgagggctg	atggaggaaa	aaggtcaata	5340
aggtcaaggg	aagaccctgt	ctctatacaca	accaaaacca	tccaacaca	cagttgggac	5400
ccaaaacaca	ggaaagtcat	cacgtyttct	tttcaattaa	ttgggatact	actatctcac	5460
actaatctga	aaggatgttg	aagagacata	ctcggcgcat	attaagcaat	ttaagctctc	5520
tgagtataaa	gggtgattga	aatttatgca	aggtattctt	ccagttggga		

taggggtctat	gtatatttagga	tgcgcctact	cttcagggtc	taaagatcaa	gtgggccttg	5820
gatcgctaa	ctggctctgt	ttgatgctat	ttatgcaagt	taggggtctat	gtatatttagga	5880
tgtctgcacc	ttctgcagcc	agtcagaagc	tggagaggca	acagtggatt	gctgcttctt	5940
ggggagaaga	gtatgcttcc	ttttatccat	gtaatttaac	tgtagaacct	gagctctaag	6000
taaccgaaga	atgttgatgct	ctgttctttat	gtgccacatc	cttggtttaaa	ggctctctgt	6060
atgaagagat	gggacctgtca	tcagcacatt	ccctagttag	cctactggct	cctggcagcg	6120
ctttttgtgg	aagactcact	agccagaaga	gaggagtggg	acagtctctct	ccaccaagat	6180
ctaaatccaa	acaaaagcag	gctagagcca	gaagagagga	caaatctttg	tggttcctct	6240
tctttacaca	tacgcaaac	acctgtgaca	gctggcaatt	ttataaaatca	ggttaacttga	6300
aggagggttaa	actcagaaaa	aagaagacct	cagtcaattc	tctacttttt	tttttttttt	6360
tcacaaatcag	ataatagccc	agcaaatagt	gataacaaat	aaaaccttag	ctgttcatgt	6420
cttgatttca	ataattaatt	cttaatcatt	aagagaccat	aataaatact	ccttttcaag	6480
agaaaagcaa	aaccattaga	attgttactc	agctccttca	aactcagggt	tgtagcatac	6540
atgagtccat	ccatcagtc	aagaatgggt	ccatctggag	tcttaagtga	gaaagaaaaa	6600
tggagacttg	taataatgag	ctagttaaca	agtgcttgtt	cattaaaaata	gcaactgaaa	6660
ttgaaacatg	aataactga	taataattcca	atcattttgcc	atttatgaca	aaaatgggtg	6720
gcactaacaa	agaaacgagca	cttcctttca	gagttttctga	gataatgtac	gtggaaacagt	6780
ctgggttgaaa	tggggctgaa	accatgtgca	agtcgtgtgc	ttgtcagttcc	aagaagttag	6840
accgagatgt	taatttttagg	gacctgtgcc	ttgtttccta	gcccaacaaga	atgcacaaat	6900
caaacagata	ctcgcagacc	tcattttaaat	tgattaaagg	aggagtgcac	ctttggccga	6960
cagtggtgta	actgtgtgtg	tgtgtgtgtg	tgtgtgtgtg	tgtgtgtgtg	tgtgggtgtg	7020
gggtgtatgt	tgtttttgtgc	ataactattt	aaggaaactg	gaatttttaaa	gttactttta	7080
tacaaaccaa	gaatatatgc	tacagatata	agacagacat	ggtttggctcc	tatatattcta	7140
tcgatgtatga	atgtattttg	tatacatctc	tcataataa	tacttaaaaa	tattttctta	7200
ttgggatttg	taatcgtacc	aacttaattg	ataaaacttg	caactgcttt	tatgttctgt	7260
ctccttccat	aaattttttca	aaatactaat	tcaacaaaaga	aaaagctctt	ttttttccta	7320
aaataaaactc	aaattttatcc	ttgttttagag	cagagaaaaa	taaagaaaaa	ctttgaaatg	7380
gtctcaaaaa	attgctaata	attttcaatg	gaaaaactaaa	tgttagttta	gctgatttga	7440
tgggggttttc	gaacctttca	ctttttgttt	gttttaccta	tttcacaaat	gtgaaaatgt	7500
ccaataaattc	ctgtccatga	aaatgcgaat	tatccagtg	agatatattt	gaccatcacc	7560
ctatggatata	tggctagttt	tgcccttatt	aagcaaattc	atttcagcct	gaatgtctgc	7620
ctatatatttc	tctgctcttt	gtattctcct	ttgaaccogt	taaaacatcc	tgtggcactc	7680

<210> 17
 <211> 1418
 <212> DNA
 <213> Homo sapiens

<400> 17						
aactgtgcga	accagaccgc	gcagccttgc	tcagttcagc	atagcggagc	ggatccgatc	60
ggatcggagc	acaccggagc	aggctcatgc	agaaggcgct	tgcgagacca	tggagaaccg	120
atacacctat	gaagattata	agaacactgc	agaatggctt	ctgtctcata	ctaagcaccg	180
acctcaagtt	gcaataatct	gtggtttctgg	attaggaggt	ctgactgata	aattaactca	240
ggccccagatc	ttgactaca	gtgaaatccc	caactttcct	cgaagtacag	tgccagggtca	300
tgctggccga	ctgggtgtttg	tggttcctgaa	tggcaggggc	tgtgtgatga	tgcaggggca	360
gttccacatg	tatgaagggt	accactctg	gaagggtgaca	ttcccagtg	gggttttcca	420
cctctcgggt	gtgggacacc	tggtagtcac	caatgcagca	ggagggctga	accocaaagt	480
tgagggttga	gatatacatg	tgatccgtga	ccatatcaac	ctacctgggt	tcagtgggtca	540
gaacctcttc	agagggccca	atgatgaaag	gtttggagat	cgtttccctg	ccatgtctga	600
tgctcacgac	cgcactatga	ggcagagggc	tctcagtagc	tggaaacaaa	tggggggagca	660
acgtgagctca	cagggaaggca	cctatgtgat	gggtggcaggc	cccagctttg	agactgtggc	720
agaatgtcgt	gtgctgcaga	agctggggagc	agacgctgtt	ggcatgagta	gactaccaga	780
agttatcgtt	gcacggcact	gtggacttcg	agtctttggc	ttctcactca	tcactaacaa	840
ggatcatcatg	gattatgaaa	gcctggagaa	ggcccaacct	gaagaagtct	tagcagctgg	900
caaacaaagct	gcacagaaat	tggaaacagt	tgtctccatt	cttatggcca	gcattccact	960
ccctgacaaa	gccagttgac	ctgccttggga	gtcgtctggc	atctcccaca	caagacccaa	1020
gtagctgcta	ccttctcttg	ccctctgctg	gagtcagtgt	cctctgtcct	taggtttag	1080
gcagaaaggaa	aagattcctg	cttctcacc	ttccacattt	cctctcacc	acctctctgg	1140
tgccagatcc	tcttctcaaa	gctgggatta	caggtgtgag	catagtgaga	ccttggcgct	1200
acaaaataaa	gctgttctca	ttcctgttct	ttcttacaca	agagctggag	ccctgcccct	1260

accacacatc	tgtggagatg	cccaggattt	gactcggggc	ttagaacttt	gcatagcagc	1320
tgctactagc	tctttgagat	aatacatccc	gaggggctca	gttctgcctt	atcctaaatca	1380
ccagagacca	aacaaggact	aatccaatcc	ctcttgga			1418

<210> 18
 <211> 1500
 <212> DNA
 <213> Homo sapiens

<400> 18						
aaagtctcgc	ccaaactttg	ttcggcacaa	ccagcgccga	ggggcgccgc	caggccagggt	60
gggagggggc	ccgcagcggg	cggccgtacc	ttcgcaaacg	cccgcttcgt	actcgggtgag	120
ggagtcgcca	ttgagcgggg	ggcggatgac	acaacgcagc	ccccggctcg	aggttccgta	180
aatccccgaag	gtgccgcgcg	agctctcgtt	cctctggctg	gcgcacgtgt	agcagcagcc	240
gcagacgccc	tgacagatgc	tcocggggca	gttcctgggc	tcctcgcact	tggactcgtc	300
acagggcagc	cagaccagcg	cccggtgtcc	ggagcgcgcg	agcagcagca	gcagccccg	360
cagcgagacc	aggaggtgcc	cgcagccggc	caacccctcg	tcctcccgcca	ccaagtacat	420
cctcctcgcg	cgcgcgcgcg	tcctcctcgc	agccggggcg	ggagcggggc	ggggcgccctc	480
ccctgcgcgcg	ggcacacgcg	cgcgcgcgcg	cgcaccagca	gcccgcggtc	ctcaccgccc	540
ctctcggggc	ccccggggcg	cgccctccct	cgccggggcg	ggcccccgcc	ccttctcgcg	600
gccgcgcgca	ccccgagccc	acgagccttg	gcgcggggcg	cagcttcccc	tcctcctcct	660
cctcctcctc	ccgggaggga	agaaaaaagt	ttcctcccg	cagctccggg	720	
tcaacccaaa	cttctggcgc	ggcggcggcg	gtggctgctg	cgctcggctc	cagccccggg	780
cgggcgccgc	tcctcctcct	ctcctccga	gtcgcccgcc	cccgagcgg	cgcagcctcc	840
ggggcggtcc	ccgcctcccg	agctgccgag	tgggcgggtg	ggcgagcac	aagatcccg	900
gcgtccgctc	cgcgcgcccc	gctcgcccca	ctcctgcgcg	gctcctccgg	gcgcttggtt	960
atggctggag	cttcagccgc	tcgggctgcc	ccctccccc	tcctacccct	tcctccagac	1020
cttcccccca	ccccacgcg	ccgcgcgcgc	ctcattgggt	gccccccctc	cccgcccg	1080
ccggccccct	ccgcctcccc	ctccccctct	cgggcgccgc	ggcccttctc	ccctccctca	1140
cacgcctcca	ctctctcccg	atctctcct	ccccagcccc	ggcgacagcc	gcggccggtg	1200
ccacccagct	gcggctctgt	ccccggcgcc	gcgggtgcgc	tgccgatggg	cttggggcgc	1260
accacgcag	cagcgagagt	cgcggtgtcc	cgggcgctcg	ctggccacgt	ggcgcagcg	1320
gcccgcctgg	gagccaggag	ggcgaggcgg	ctgcaccttc	ggggccagat	tggagttcga	1380
agagtggcgc	gtacccacga	agctcggggc	cgggggcgat	gctgcagcct	cgggagggtg	1440
tcgcgcgctc	gaactccggg	aaaggggaag	aaaggcatgg	aacctccgca	cactggatga	1500

<210> 19
 <211> 1530
 <212> DNA
 <213> Homo sapiens

<400> 19						
atgcccccgc	aacagcatca	tcagcccaac	aaagtctcgc	ccaaactttg	ttcggcacaa	60
ccagcgcgca	ggggcgccgc	caggccagggt	gggagggggc	ccgcagcggg	cggccgtacc	120
ttcgcaaacg	cccgcttcgt	actcgtgag	ggagtcgcca	ttgagcgggg	ggcggatgac	180
acaacgcagc	ccccgggtcg	aggttccgta	aatccccgaag	gtgcgcgcgc	agctctcgtt	240
cctctggctg	gcgcacgtgt	agcagcagcc	gcagacgccc	tgacagatgc	tcctccgggc	300
gttctcgggc	tcctcgcact	tggactcgtc	acagggcagg	cagaccagcg	cccggtgtcc	360
ggagcgcgcc	agcagcagca	gcagccccag	cagcgagacc	aggaggtgcc	cgcagccggc	420
caacccctcg	tcctcccgcca	ccaagtacat	cctcctcgcg	cgcgcgcgcg	tcctcctcgc	480
agccggggcg	ggagcggggc	ggggcgccctc	ccctgcgcgcg	ggcacacgcg	ccgcgcgcgc	540
cgcaccagca	gcccgcggtc	ctcaccgccc	ctctcggggc	ccccggggcg	cgcctccctc	600
cgcggggcga	ggcccccgcc	ccttctcgcg	gcccgcgcga	ccccagccc	acgagccttg	660
gcgcggcgcg	cagcttcccc	tcctcctcct	cctcctcctc	ccgggaggga	gggggaaaaa	720
agaaaaaagt	ttctcctccg	cagctccggg	tcaacccaaa	cttctggcgc	ggcgcgccgc	780
gtggctgctg	cgtctcgctc	cagcccgggc	cggcgcgccc	tcctcctcct	cctcctcga	840
gtcggcgccg	ccgcagcggg	cgcagcctcc	gggcgggtcc	cgcctcccg	agctcgcgag	900
tgggcgcggg	ggcgagcagc	aagatccgcg	gcgtccgctc	cgcgcgcgcc	gctcgctcca	960
gcctcgcgcg	gctcctccgg	gcgcttggtt	atggctggag	cctcagcgcg	tcgggctcgc	1020
ccctccccca	tcctacctcc	tcctccagac	cttcccccca	cccccaagcg	ccgcgcgcgc	1080
ctcattggct	gccccccctc	ccggggccgg	cgggccccct	cgcctccccc	ctccccctct	1140

cgggcgccgc	ggcccttct	ccctccctca	cacgcctcca	cctcttcccg	atctctctct	1200
ccccgagccc	ggcgccacga	gcccgcctgt	ccaccgagct	gcggtctctg	ccccggcgcc	1260
gcgggtgcgc	tcgggatggg	cttggggcgc	accagcgag	cagcgagagt	cgcggtgtcc	1320
cgggcgctcg	ctggcaccgt	ggccgcagcg	gcccgcctgt	gagccaggag	ggcgaggcgg	1380
ctgcaccttc	ggggccagat	tggagtctga	agagtggcgg	gtacccccaga	agctcggggc	1440
cggggcgatg	ctggcagcct	cgggagggtg	tcgcgcgatc	gaactccggg	aaaggggaag	1500
aaaggcatgg	aacctccgca	cactggatga				1530

```

<210> 20
<211> 2935
<212> DNA
<213> Homo sapiens

<220>
<221> modified_base
<222> (1528)
<223> n = g, a, c or t

```

<400> 20						
atgaaaaacag	ccgcactcac	tccgcgcgcg	tctccgcccac	cgccaccact	gcggccaccg	60
ccaatgaaac	gcctcccgct	cctagtgggt	ttttccactt	tgttgaaatg	ttcctatact	120
caaaattgca	ccaagacacc	tgtctctcca	aatgcaaaat	gtgaaatagc	caatggaatt	180
gaagcctgct	attgcaacat	gggattttca	ggaaatgggt	tcacaatttg	tgaagatgat	240
aatgaatgtg	gaaatttaac	tcagtcctgt	ggcgaaaatg	ctaattgcac	taacacagaa	300
ggaagtattt	attgtatgtg	tgtacctggc	ttcagatcca	gcagtaacca	agacagggtt	360
atcataaatg	attggaaccgt	ctgtatagaa	aatgtgaatg	caaacctgcc	tttagataat	420
gtctgtatag	ctgcaaatat	taataaaact	ttacaaaaaa	tcagatccat	aaaagaacct	480
gtggctttgc	tacaagaagt	ctatagaaat	tctgtgacag	atctttcacc	aacagatata	540
attcatata	tagaaatatt	agctgaatca	tcttcattac	taggtttacaa	gaacaacact	600
atctcagcca	aggacacct	ttctaactca	actcttactg	aatttgttaa	aacctgtgaat	660
aattttgttc	aaagggatac	atttgtagtt	tgggacaaat	tatctgtgaa	tcataaggaga	720
acacatctta	caaaactcat	gcacactgtt	gaacaagcta	ctttaaggat	atcccagagc	780
ttccaaaaga	ccacagagtt	tgatacaaat	tcaacggata	tagctctcaa	agttttcttc	840
tttgattcat	ataacatgaa	acatatctat	cctcatatga	atatggatgg	agactacata	900
aatatatttc	caaaagaaaa	agctgcata	gattcaaatg	gcaatgttgc	agttgcattt	960
ttatattata	agagtattgg	tcctttgtct	tcatcatctg	acaactctct	attgaaacct	1020
caaaattatg	ataattctga	agaggaggaa	agagtcatat	cttcagtaat	ttcagtctca	1080
atgagctcaa	accacccac	attatatgaa	cttgaaaaaa	taacatttac	attaagtcat	1140
cgaagggtca	cagataggta	taggagctca	tgtgcatttt	ggaattactc	acctgatacc	1200
atgaatggca	gttggtcttc	agaggcctgt	gagctgacat	actcaaatga	gaaccacacc	1260
tcatgcgcgt	gtaatcacct	gacacatttt	gcaattttga	tgtcctctgg	tccttccatt	1320
ggtattaaag	attataatat	tcttacaagg	atcactcaac	taggaataat	tatttccactg	1380
atttgtcttg	ccatatgcac	ttttaccttc	tggttcttca	gtgaaattca	aagcaccagg	1440
acaacaattc	acaaaaatct	ttgctgtagc	ctatttcttg	ctgaacttgt	ttttcttgtt	1500
gggatcaata	caaatataaa	taagctcatt	tctgtttcaa	tcattgcccg	actgctacac	1560
tacttctttt	tgcgtctctt	tcgactggatg	tgcattgaag	gcatacatct	ctatctcatt	1620
gttggtgggtg	tcacttcaca	caagggtatt	ttgcacaaga	atttttatat	ctttggctat	1680
ctaagcccag	cgggtgttagt	tggattttcg	gcagcactag	gatacacagata	ttatggcaca	1740
acaaaagtat	gttggtcttag	caccgaaaca	cactttattt	ggagttttat	aggaccagca	1800
tgctaatatc	ttcttgttaa	ttctctggct	tttggagtca	tcataataca	agtttttctg	1860
cacactgcag	gggtgaaacc	agaagtttagt	tgctttgaga	acataaggtc	ttgtgcaaga	1920
ggagccctcg	ctcttcttgt	ctctctcggc	accacctgga	tctttggggg	ttcccatggt	1980
gtgcacgcac	cagtggttac	agctttacct	ttcacagtca	gcaatgcttt	ccaggggatg	2040
ttattctttt	tattctctgt	tgttttatct	agaaagattc	aagaagaata	ttacagattg	2100
ttcaaaaatg	tccccctgtg	ttttggatgt	ttaaaggtaa	catagagaat	ggtggataat	2160
tacaaactgca	tcaaaaataa	aaattccaa	ctgtggatga	ccaatgtata	aaaatgactc	2220
atcaaattat	ccaattatta	actactagac	aaaaagttat	ttaaatcagt	ttttctgttt	2280
atgctatagg	aactgttagt	aataaggtaa	aattatgtat	catatagata	tactatgttt	2340
ttcatgttga	aatcagttctg	tcaaaaatag	tattgcagat	atttggaaag	taattgggtt	2400
ctcaggagtg	atatcactgc	acccaaggaa	agattttctt	tcaaacacga	gaagtatatg	2460
aatgtcctga	aggaaaccac	tggcttgata	tttctgtgac	tcgtgttgcc	tttgaactaa	2520

gtccccctacc	acctcggttaa	tgagctccat	tacagaaagt	ggaacataag	agaatgaagg	2580
ggcagaatcat	caaacagtga	aaaggggaatg	ataagatgta	ttttgaaatga	actggttttt	2640
ctgtagacta	gctgagaat	tggtgacata	aaataaagaa	ttgaagaaac	acattttacc	2700
atittgtgaa	ttgttctgaa	cttaaatgtc	cactaaaaca	acttagactt	ctgtttgcta	2760
aatctgtttc	tttttctaatt	attctaaaaa	aaaaaaaaag	gtttmccyc	caaattgaaa	2820
aaaaaaggga	aaaaaaaatc	tggtttctaag	gttagactga	gatataact	atttccattc	2880
ttatttcaca	gattgtgact	ttggaatagtt	aatcagtaaa	atataaatgt	gtcga	2935

<210> 21
 <211> 3828
 <212> DNA
 <213> Homo sapiens

<400> 21						
aagacaacgt	cactagcagt	ttctggagct	acttgccaa	gctgagtggt	agctgagcct	60
gccccaccac	caagatgatc	ctgagcttgc	tggtcagcct	tgggggcccc	ctgggctggg	120
ggctgctggg	ggcagctggc	cagggttcca	gtactagcct	ctctgatctg	cagagctcca	180
ggacacctgg	ggctctgaag	gcagaggctg	aggacaccag	caaggacccc	gttgagccta	240
actgggtccc	ctacccaatg	tcaccaagct	tcaccttact	agctctttgc	aaaacagaga	300
aattctctcat	ccactcgcag	cagccgtgtc	cgcaggggagc	tcagactgc	cagaaagtca	360
aagtcatgta	cgcgatggcc	cacaagccag	tgtagccagt	caagcagaag	gtgctgacct	420
ctttggcctg	gaggtgtgtc	cctggctaca	cgggccccaa	ctgcgagcac	cacgatcca	480
tggcaatccc	tgagcctgca	gatcctggtg	acagccacca	ggaacctcag	gatggaccag	540
tcagcttcaa	acctggccac	cttgctgcag	tgatcaatga	gggtgaggtg	caacaggaac	600
agcaggaaac	ttctgctggga	gatctccaga	atgatgtgca	cggggtggca	gacagcctgc	660
caggcctgtg	gaaagccctg	cctggttaacc	tcacagctgc	agtgatggaa	gcaaatcaaa	720
cagggcacga	gttccctgat	agatccttgg	agcagggtgt	gctacccacc	gtggacacct	780
tcctacaagt	gcatttcagc	cccattctga	ggagctttaa	caaagcctg	cacagcctta	840
cccaggccat	agaaaacctg	ttctcttgagc	tggaaggccaa	ccgcacggcc	atctccagag	900
tcaggagaca	tgccgtggcc	agggctgact	tcacaggagt	ttgtgcccac	tttagggcca	960
aggtccagga	gacacactag	agagtgggtc	agctgcgaca	ggacgtggag	gaccgcctgc	1020
acgccacga	cttaccctg	caccgtcga	ttctcagagt	caaagccgat	gtgcaacca	1080
aattgaagag	gctgcacaag	gctcaggagg	ccccagggac	caatggcagt	ctgggtgttg	1140
caacgcctgg	ggctggggca	aggcctgagc	cggacagcct	gcaggccagg	ctgggcccagc	1200
tgacagaggaa	cctctcagag	ctgcacatga	ccacggcccg	caggggaggag	gagttgcagt	1260
acaccctgga	ggacatgagg	gccaccctga	cccgccacgt	ggatgagatc	aaggaaactgt	1320
actccgaatc	ggacgagact	ttcgatcaga	ttagcaaggt	ggagcggcag	gtggaggagc	1380
tgcaggtgaa	ccacacggcg	ctccgtgagc	tgcgcgtgat	cctgatggag	aagtctctga	1440
tcattggagga	gaacaaggag	gaggtggagc	ggcagctcct	ggagctcaac	ctcacctgc	1500
agcacctgca	gggtggccat	gccgacctca	tcaagtacgt	gaaggactgc	aattgcgaga	1560
agctctattt	agacctggac	gtcatccggg	agggccagag	ggacgccacg	cgtgccctgg	1620
aggagaccac	ggtgagcctg	gaecagcggc	ggcagctgga	cggctcctcc	ctgcaggccc	1680
tgacagaacg	cgtggagcgc	gtgtcgtctg	ccgtggagcg	gcacaaagcg	gagggcgagc	1740
ggcgcgcg	ggccacgtcg	cggctccgga	gccaaagtga	ggcgctggat	gacgaggtgg	1800
gcgcgctgaa	ggcggccggc	gccgaggccc	gccacagagt	gcgcacagct	cacagcgct	1860
tcgcgcgctc	ctggaggagc	gcgtcgcggc	acgaggcggt	gctggccgcg	ctcttcgggg	1920
aggaggtgct	ggaggagagt	ttctgagcaga	cgcgcgggac	gctgccctgc	agctacagag	1980
agatccgcgt	ggccctcgag	gacgcgccta	gcgggctgca	ggagcaggcg	ctcggctggg	2040
acgagctggc	cgcccgagtg	acggccctgg	agcaggctc	ggagcccccg	cggccggcag	2100
agcacctgga	gccacgccac	gacgcggggc	gcgaggaggc	cgccaccacc	gccttggcgc	2160
ggtcggcgct	ggagcctccag	acgacgtcaa	gaatgtcggg	cggtgctgcy	2220	
aggcgcggcg	cggggcgggg	gcgcgctccc	tcaacgcctc	ccttgacgcg	ctccacaacg	2280
caactctcgc	cactcagcgc	agcttgagac	agcaccagcg	gctcttccac	agcctctttg	2340
ggaacttcca	agggtcctat	gaagccaaag	tcagcctgga	cctgggggag	ctgcagacca	2400
tgctgagcag	gaaaggggaag	aagcagcaga	aagacctgga	agctccccgc	aagaggggaca	2460
agaagggaagc	ggagcctttg	tgggacatac	gggtcacagg	gcctgtcgga	gggtgcttgg	2520
gcgcggcgct	ctgggaggca	grwtccctcg	tgcccttcta	tgccagcttt	tcagaaggga	2580
cggctgcctc	gcagacagtg	aagttcaaca	ccacatacat	caacattggc	agcagctact	2640
tcctgaaaca	tgactacttc	agcctccctg	agcgtgggtg	ctacctgttt	gcagtgagcg	2700
ttgaattttg	cccaggggcca	ggcaccgggc	agctgggtgt	tggagggtcac	cactcgagctc	2760
cagtcgtgtac	cactgggcag	gggagtgga	gcacagcaac	ggctctttgc	atggctgagc	2820

tgagagagg	tgagcgagta	tggtttgagt	taaccaggg	atcaataaca	aagagaagcc	2880
tgtcggggc	tgcatttggg	ggcttctga	tgtttaagac	ctgaacccca	gccccaatct	2940
gatcagacat	catggactcg	cccagctctc	ctcgccctgg	ggctctggcc	aaggatgggc	3000
tgagggtcat	tcaagttggtc	tgtctcttcc	ctggaaacct	tctgcaaaga	tgggtgggtg	3060
tacgtggctt	ccctgtaacc	acatggggct	tggccatttc	tccatgatga	gaaggactgg	3120
aatgctcttc	cgggcaggac	atggctctag	gaagcctgaa	ccttggcttg	gcctgccttc	3180
tcagacagca	cggcctgggg	tccaactctt	caccacaccc	tgtattctac	aacttctttg	3240
gtgttttgc	cctcctgtgg	tggaaaactt	ctgtacaaca	ctttaaactt	ttctcttgct	3300
tcctcttctc	ttctccctta	tcgatgata	gaaagacatt	cttccccagg	aggaatgttt	3360
aaaatggagg	caacattttg	gccaacattg	gaaagcacta	gagggcaatg	ggattaaacc	3420
aaactgcttg	gtctctatta	gtcagtaagt	aagacgacag	cctggccaac	caagggaag	3480
gaaattagta	tctttagttt	cagtcattcc	ttgtaggata	tgggttagct	gtgccccac	3540
ctaaaatatt	atcttgaatt	gtaatcccta	taatccccac	atcaagggag	agatcaggtg	3600
gaggtaattg	gatcttgggg	gcgggtcccc	catgctgttc	ttgtgatagt	tctcacgaga	3660
tctgatgatt	ttataagttt	gatagttctc	cctgtgttca	ttctccttcc	tgccaccttg	3720
tgaagtgc	ttgggtctctc	ttcactgtct	gccatgattg	taagtcttct	gaggcctccc	3780
cagccatgtg	gaacagttag	tcaattaaac	ctctttcctt	tataaatt		3828

<210> 22
 <211> 238
 <212> DNA
 <213> Homo sapiens

<400> 22						
atgggcaaa	acttcatgac	taaaacacca	aaagcatttg	caacaaaagc	caaaattgac	60
aaatgggag	taattaaact	aaagagcttc	tgcacagcaa	aagaaactat	catcagagtg	120
aacagtcaac	ctacagctg	gcagaaaact	tttgcaatct	atccatctga	caaaagggtga	180
atagccagaa	tctacaagga	gcttgaacaa	atttataaga	aaaaaaaaacc	aacaaaaa	238

<210> 23
 <211> 1706
 <212> DNA
 <213> Homo sapiens

<400> 23						
cgctccgcac	acatttctctg	tgcgggccta	agggaaactg	tggccgctg	ggcccggggg	60
gggattcttg	gcagttgggg	ggctcgtcgg	gagcgagggc	ggagggggaag	ggagggggaa	120
cgggttgagg	gaagccagct	gtagaggggc	gtgaccgcgc	tccagacaca	gctctgcgtc	180
ctcgagcggg	acagatccaa	gttgggagca	gctctgcgtg	cggggcctca	gagaatgagg	240
cggcgcttgc	cctgtgctct	cctctggcag	gcgctctggc	cggggcgggg	cggcgggcgaa	300
caccccaactg	ccgaccgtgc	tggctgctcg	gcctcggggg	cctctacagc	cctgcaccac	360
gctaccatga	agcggcaggc	ggcggaggag	gcctgcatcc	tgcagaggtg	ggcgctcagc	420
accgtgctg	cgggcgccga	gctgcgcgc	gtgctcgcgc	tctctcgggc	aggcccaggg	480
ccgggagggg	gctccaaagg	cctgtctgtc	tgggtcgcac	tggagcgcag	gctgtccca	540
tgcacctg	agaacagacc	tttgcgggg	ttctcctggc	tgtctctcga	ccccggcggt	600
ctcgaaaagg	acacgctgca	gtgggtggag	gagccccaac	gctcctgcac	cgcgcggaga	660
tgcgcgggtac	tccaggccac	cgggtggggc	gagcccgag	ctggaaggag	atgcgatgcc	720
acctgcgcgc	caacgggtac	ctgtgcaagt	accagtttga	ggctcttggt	cctgcgcgcg	780
gccccggggc	cgctcttaac	ttgagctatc	gcgcgccttc	ccagctgcac	agcgcgcgtc	840
tggacttcag	tccacctggg	accgaggtga	gtgcgctctg	ccgggggacag	ctcccgatct	900
cagttactgt	catcgcggac	gaaactcggc	ctcgctggga	caaaactctc	ggcgatgtgt	960
tggtgtccctg	ccccgggagg	tacctcgtg	ctgggcaaatg	cgcagagctc	ctctaaatgcc	1020
tagacgactt	ggtaggcttt	gcctgcgaat	gtgctacggg	cttcagagct	ggggaaggagc	1080
gccgctcttg	tgtgaccagt	ggggaaggac	agccgaccc	tggggggacc	ggggtgccca	1140
ccaggcgccc	gccggccact	gcaaccagcc	ccgtgccgca	gagaacatgg	ccaatcaggg	1200
tcgacgagaa	gctgggagag	acaccaactt	tcctctgaaca	agacaattca	gtaaacatcta	1260
ttcctgagat	tcctcgatgg	ggatcacaga	gcacgatgtc	tacccttcaa	atgtcccttc	1320
aagccgagtc	aaaggccact	atcaccocat	caggggagcgt	gatttccaag	tttaattcta	1380
cgacttctct	tgcactcctt	caggcttttg	actcctctct	tgcctgtgtg	ttcatatttg	1440
tgagcacagc	agtagtagtg	ttggtgact	tgaccatgac	agtagctggg	ctctatgaagc	1500
tctgctttca	cgaaagcccc	cttctccagg	caagggaagga	gtctatgggc	ccgcgggggc	1560

tgagagagtga	tctctagagccc	gctgcttttgg	gctccagttc	tgacacattgc	acaaacaatg	1620
gggtgaaagt	cggggactgt	gatctgcggg	acagagcaga	gggtgccttg	ctggcgaggt	1680
ccctcttgg	ctctagtgt	gcatag				1706

<210> 24
 <211> 1944
 <212> DNA
 <213> Homo sapiens

<400> 24						
atgggcaaaag	acttcatgac	taaaacacca	aaagcatttg	caacaaaagc	caaaattgac	60
aaatgggac	taattaaact	aaagagcttc	tgacacagca	aagaactat	catcagagtg	120
aacagtcaac	ctacagactg	gcagaaaaact	tttgcattct	atccattctga	caaaaggggta	180
atagccagaa	tctacaagga	gcttgaacaa	atattataaga	aaaaaaaaacc	acaaaaaacg	240
ctccgcacac	atttcctgtc	gcggcctaag	ggaaactgtt	ggccgctggg	cccgcggggg	300
gattcttggc	agttgggggg	tccgtcggga	gcgagggcgg	agggggaagg	aggggggaacc	360
gggttgggga	agccagctgt	agagggccgt	gacccgcgtc	cagacacagc	tctgcgtctc	420
cgagcgggac	agatccaagt	tgaggcgagc	tctgcgttgc	gggcctcaga	gaatgagggc	480
ggcgttgcgc	ctgtgctctc	tctggcaggg	gctctggccc	gggcggggcg	gcggcgaaaca	540
ccccactgcc	gaccgtgtct	gctgctcggc	ctcggggggc	tgctacagcc	tgaccacagc	600
taccatgaag	cggcaggcgg	ccgaggaggc	ctgcattcctg	cgaggtgggg	cgctcagcac	660
cgctgcgtgc	ggcgccgagc	tgccgcgtgt	gctcgcgtct	ctgcggggcag	gcccaggggc	720
cggaggggggc	tccaagagcc	tgctgttctg	ggtcgcaactg	gagcgcagggc	gttcccactg	780
caccctggag	aacgagcctt	tgccggggtt	ctcctgggtg	tccctcgacc	ccggcggtct	840
cgaagcgagc	acgctgcagt	gggtggagga	gccccaacgc	tccctgcaccg	cgccgagatg	900
cgcggtactc	caggccaccg	gtggggctga	gcccgcagct	ggaaggagat	gcgatgccac	960
ctgcgcgccca	acggctacct	gtgcaagtac	cagtttgagg	tcttgtgtcc	tgccgcggcg	1020
cccggggggcg	cctctaactt	gagctatcgc	gcgcccttcc	agctgcacag	cgccgctctg	1080
gacttcagtc	cacctgggag	cgaggtgagt	gcgctctgcc	ggggacagct	cccgatctca	1140
gttaacttga	tccgggacga	aatcgccgct	cgctgggaca	aactctcggy	cgatgtgttg	1200
tgctcctgcc	ccgggaggta	cctccgtgct	ggcaaatgcg	cagagctccc	taactgccta	1260
gacgacttgg	gaggtcttgc	ctcggaatgt	gctaagggtc	tcgagctggg	gaaggacggc	1320
cgctcttgtg	tgaccagtgg	ggaaggacag	ccgacccttg	gggggacccg	ggtgccacc	1380
aggcgccgcg	cgccactgcg	aaccagcccc	gtgccgcaga	gaacattggc	aatcaggggtc	1440
cagcagaagc	tgggagagag	accaactgtc	ctgaaacaag	acaattcagt	aacatctatt	1500
cctgagattc	ctcgatgggg	atcacagagc	acgatgtcta	cccttcaaat	gtcccttcaa	1560
gccgagtcac	agccactat	cacccactca	gggagcgtga	tttccaaagt	taattctacg	1620
acttcctctg	ccactcctca	ggctttcgac	tctcctctg	ccgttgtctt	catatttgtg	1680
agcacagcag	tagtagtgtt	ggtgatcttg	accatgacag	tactggggct	tgtcaagctc	1740
tgctttcacg	aaagccccct	ttcccagcca	aggaaggagt	ctatggggcc	gccggggcctg	1800
gagagtgtac	ctgagcccg	tctgttgggc	tccagttctg	cacattggcc	aaacaatggg	1860
gtgaaagtgc	gggactgtga	tctgcgggac	agagcagagg	gtgccttgct	ggcggaggtc	1920
cctcttggtc	ctagtgtatg	atag				1944

<210> 25
 <211> 1408
 <212> DNA
 <213> Homo sapiens

<400> 25						
aaatgggatt	gagttaaaaa	tatttttatt	taaatatata	tttttaaagca	gttctttttt	60
tttttttttt	tttttttata	cacacacttc	aagagaatat	gcacagctota	ggcggggcac	120
gggtggctac	gcctgttaac	ccagcacttt	gggaggccga	ggcattgtgga	tcacctgagg	180
tcaggagttt	tgagaccagc	tagacaacat	ggtgaaacct	tgctctctat	aaaaatataa	240
aatttggctg	gagtggtggt	gcatgcctgt	aatcccagct	acttggaagg	ctgaggcagg	300
agaattgtct	gaacctagga	gggtgaggtt	gcagtgagct	gagattgcac	cattgcactc	360
cagcctgtgc	aacaaaaagt	aaactccatt	tcaagaaaaa	aaaaaaaaaa	agaatatgca	420
cagctctgaat	gtataccagg	agtggtgagag	acacatgccc	acttcatgca	actcctaacc	480
tcaaaagtcta	aatcagatat	ttttattaac	aatgacaact	tgttgccaac	tcctctgttc	540
taatacccaa	agacccaggg	tacctgaaaag	gactttgcaa	ccaagcaagg	tcaatgtctt	600
caaattctgga	tacacacttt	ccccctgtga	gattcaaaa	gtgcttctct	cccgggtgtc	660

tcacagcttcc	ttactctctt	ttctgggatt	tctttttctt	ctttctttct	ggctcttctt	720
ccactggctg	aaactgggtc	cctaactgaa	acagccctg	acttagccca	agcatgcttc	780
cccttagctgc	tgtgagaatt	ttgtcttctt	caccagccag	gtcctcaagg	caaagtcttc	840
agccagctgt	ttaagagcaa	cttcccgcaa	atcagaaact	cactgtgatt	ccaaaaatgt	900
tcttgagccc	tggacccttg	cccccaaaat	attttcatct	ttccccaaaa	ctctctttaa	960
aggagcatgc	ataacagtgt	gttgaaagac	agttgttggt	tttttgattt	tagcatatta	1020
ttctctgatat	gaaatatgtt	ttataataat	tcctattatt	tttatcttat	gttttgattt	1080
gttgataaat	ccctttttgt	ccttctaaga	tgttctattg	taaaatcact	tataaggtat	1140
gattactctt	tatgctatta	cttttatatg	catttgggta	ataaatagaa	aatgggtgat	1200
gatatgattg	actgatgcgc	agtcacagag	atgtatgaat	aatctcataa	aacagtatca	1260
cagacattaa	gctaaaactgt	tctgtttttt	tgaaagaaca	actcatactt	tggaaacagt	1320
gtcaatatta	atttgttgca	aatattttaat	ttaataaaac	atttttgtac	catgaaaaaa	1380
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa				1408

<210> 26

<211> 3166

<212> DNA

<213> Homo sapiens

<400> 26

gtccgcgcgt	gtccgcgcgc	gcgtgtgcca	gcgcgcgcgt	cttgccgcgt	cgccgcgcgc	60
cggtgtgcac	taactctctc	ggcgccgcgc	gcggcgctaa	cctctcggtt	attccaggat	120
ctttggagac	ccgaggaaga	ccgtgttgac	caaaagcaag	acaaatgact	cacagagaaa	180
aaagatggca	gaaccaaggg	caactaaagc	cgctcagggt	tgaacagctg	gtagatgggc	240
tggcttactg	aaggacatga	ttcagactgt	cccggaacca	gcagctcata	tcaaggaagc	300
cttatcagtt	gtgagtgagg	accagtctgt	gtttgaggtg	gcctacggaa	cgccacacct	360
ggctaaagca	gagatgacct	cgctctcttc	cagcgactat	ggacagactt	ccaagatgag	420
cccacgcgtc	cctcagcagg	attggctgtc	tcaaccccca	gccagggtca	ccatcaaaat	480
ggaatgtaac	cctagccagg	tgaatggctt	aaggaactct	cctgagtgaat	gcagtgtggc	540
caaaggcggg	aagatgggtg	gcagcccgca	caccgttggt	atgaactacg	gcagctacat	600
ggaggagaa	cacatgccac	ccccaaacct	gaccacgaac	gagcgcagag	ttatcgtgcc	660
agcagatcct	agcgtatgga	gtacagacca	tgtgcgcgag	tggtcggagt	ggcggtgtaa	720
agaatatggc	cttccagacg	tcaacatctt	gttattccag	aacatcgatg	ggaaggaaat	780
gtgcaagatg	accaagggaac	acttcacagag	gctcaccccc	agctacaacg	ccgacatcct	840
tctctccacat	ctccactacc	tcagagagac	ttcctctcca	cattttgctt	cagatgatgt	900
tgataaagcc	ttacaaaact	ctccacggtt	aatgcatgct	agaacacacg	atttaccata	960
tgagcccccc	aggagatcag	cctggaccgg	tcacggccac	cccacgccc	agtcgaagac	1020
tgctcaacca	tctctctcca	cagtgcacca	aactgaagac	cagcgtcttc	agtttagatc	1080
ttatcagatt	cttggaccac	caagtagccg	ccttgcaaat	ccaggcagtg	gccagatcca	1140
gctttggcag	ttctctctgg	agctcctgtc	ggacagctcc	aactccaagt	gcatcaacct	1200
ggaaggcacc	aacggggagt	tcaagatgac	ggatcccgcg	gaggtggccc	ggcgctgggg	1260
agagcggaa	agcaaaacca	acatgaacta	cgataagctc	agcgcgcgcc	tccgttacta	1320
ctatgacaag	aacatcatga	ccaaggtcca	tgggaagcgc	tacgcctaca	agttcgaaat	1380
ccacgggatc	gccacggccc	tccagcccca	ccccccggag	tcatctctgt	acaagtaccc	1440
ctcagacctc	ccgtacatgg	gctcctatca	cgccccacca	cagaagatga	actttgtggc	1500
gccccaccct	ccagccctcc	ccgtgacatc	ttccagtttt	tttctgtccc	caaacccata	1560
ctggaattca	ccaactgggg	gtatataccc	caacactagg	ctccccacca	gccatattgc	1620
ttctcatctg	ggcacttact	actaaagacc	tggcggaggc	ttttccatc	agcgtgcatt	1680
caccagccca	tcgcccacaa	ctctatcgga	gaacatgaat	caaaagtgc	tcaagaggaa	1740
tgaaaaaagg	tttactgggg	ctgggggaag	aagccgggga	agagatccaa	agactctttg	1800
gagggagtta	ctgaagtctt	actacagaaa	tgaggaggat	gctaaaaatg	tcacgaatat	1860
ggacatatca	tttgtggact	gaccttgtaa	aagacagtgt	atgtagaagc	atgaagtctt	1920
aaggacaaag	tgccaaagaa	agtggtctta	agaaatgtat	aaactttaga	gtagagtttg	1980
aatcccacta	atgcaaaact	ggatgaaact	aaagcaatag	aaacaacaca	gttttgacct	2040
aacataccgt	ttataatgcc	attttaagga	aaactacctg	tatttaaaaa	tagtttcata	2100
tcaaaaaaca	gagaaaaagc	acgagagaga	ctgtggccca	tcaacagacg	ttgatattgca	2160
actgcatggc	atgtgctgtt	ttggttgaaa	tcaaatacat	tccgtttgat	ggacagctgt	2220
cagctttctc	aaactgtgaa	gatgacccaa	agtttccaac	tcctttacag	tattacccgg	2280
actatgaact	aaaagtgagg	actgaggatg	tgtatagagt	gagcgtgtga	ttgtagacag	2340
aggggtgaag	aaggaggagg	aagaggcaga	gaaggaggag	accaggctgg	gaaagaaact	2400
tctcaagcaa	tgaagactgg	actcaggaca	tttggggact	gtgtacaatg	agttatggag	2460

actcgagggt	tcatgcagtc	agtgtttatc	caaaccaggt	gttaggagaa	aggacacagc	2520
gtaatggaga	aaggggaagt	gtagaattca	gaaacaaaaa	tgcgcattct	ttcttttgtt	2580
tgtcaaatga	aaatttttaac	tgggaattgtc	tgatatattaa	gagaacacatt	caggacctca	2640
tcattatgtg	ggggctttgt	tctccacagg	gtcagggttaag	agatgggcctt	cttggctgcc	2700
acaatcagaa	atcacgcagg	catttttgggt	aggcggcctc	cagtttttctt	ttgagtcgcg	2760
aacgctgtgc	gtttgtcaga	atgaagtata	caagtcacatg	tttttcccc	tttttatata	2820
ataattatat	aactttatga	tttatacact	acgagttgat	ctcggccagc	caaagacaca	2880
cgacaaaaga	gacaaatcgat	ataatgtggc	cttgaatttt	aactctgtat	gcttaatggt	2940
tacaatatga	agttatttagt	tccttagaatg	cagaatgtat	gtaataaaat	aagcttgccc	3000
tagcatggca	aatcagattt	atacaggagt	ctgcatttgc	acttttttta	gtgactaaag	3060
ttgcttaagt	aaaacatgtg	ctgaatgttg	tggattttgt	gttataattt	acttttgcca	3120
ggaacttgtg	caaggggagag	ccaaggaaat	aggatgtttg	gcaccc		3166

<210> 27

<211> 4289

<212> DNA

<213> Homo sapiens

<400> 27

aggaaaacggt	ttattaggag	ggagtgggtg	agctgggcca	ggcaggaaga	cgctggaata	60
agaacacattt	ttgctccagc	ccccatccca	gtcccgggag	gctgccgcgc	cagctgcgoc	120
cgagcgagccc	ctcccgggt	ccagcccggt	ccggggccgc	gccggacccc	agcccgccgt	180
ccagcgctg	cggtgcaact	gcggccgcgc	ggtggagggg	agggtggccc	ggctccgcga	240
aggctagcgg	cccgccaccc	gcagagcggg	cccagaggga	ccatgacctt	gggtccccc	300
aggaaaggcc	ttctgatgct	gctgatggcc	ttggtgaccc	aggagagacc	tgtagagccg	360
tctcgggggc	cgctggtgac	ctgcacgtgt	gagagccac	attgcaaggg	gcctacctgc	420
cgggggcgct	ggtgacagtc	agtgctgtg	cgggaggagg	ggagggcacc	ccaggaaact	480
cggggctg	ggaaactgca	cagggaagctc	tgccaggggg	gccccaccga	gttcgtcaac	540
cactactgtg	gcgacagcga	cctctgcaac	cacaacgtgt	ccctgggtgt	ggaggccacc	600
caacctcctt	ccgagcagcc	gggaacagat	ggccagctgg	ccctgatcct	gggcccctgt	660
ctggccttgc	tggcccttgt	ggccctgggt	gtcctggggc	tgtaggcattg	ccgacggagg	720
caggagaagc	agcgtggcct	gcacagcgag	ctgggagagt	ccagctctcat	ctgaaagaca	780
tctgacagcg	gcgacacgat	gttgaggagc	ctcctggaga	gtgactgcac	cacagggagt	840
ggctcagggg	tcctccttct	ggtgcagagg	acagtgccac	ggcagggtgc	cttggtggag	900
tgtgtgggaa	aaggcccgcta	tggcgaaagt	tggcggggct	tgtaggcacg	tgagagtgtg	960
gccgtcaaga	tcttctcctc	gagggatgaa	cagtccttgt	tcggggagac	tgagatctat	1020
aacacagtat	tgctcagaca	cgacaacatc	ctaggcttca	tcgcctcaga	catgacctcc	1080
cgcaactcga	gcacgcagct	gtggctcctc	acgcactacc	acgagcacgg	ctccctctac	1140
gactttctgc	agagacagac	gtcggagccc	catctggctc	tgaggctagc	tgtagtccgcg	1200
gcctgcggcc	tggcgacact	gcaegtggag	atcttcggta	cacagggcga	accagccatt	1260
gcccaaccgc	actttcaagc	ccgcaatgtg	ctgggtcaaga	gcaaccttca	gtgttgctac	1320
gccgacctgg	gcctgtgctg	gatgcactca	cagggcgagc	attacctgga	catcggcaac	1380
aaccgcagag	tgggcaccaa	gcggtacatg	gcacccgagg	tgctggacga	gcagatccgc	1440
acggactgct	ttgagtccta	caagtggact	gacatctggg	cctttggcct	ggtgctgtgg	1500
gagatgtccc	gcgggacctc	ctgtgaattgg	atcgtggagg	actatagacc	acctttctat	1560
gatgtgtgtc	ccaatgacct	cagctttgag	gacatgaaga	aggtgtgtgt	tgtagatcac	1620
cagaccoccca	ccatccctaa	ccggctggct	gcagaccogg	tcctctcagg	cctagctcag	1680
atgatgcggg	agtgctggta	ccccaaacccc	ctctgcccgac	tcaccgcgct	gcggatcaag	1740
agacacttac	aaaaaattag	caacagtcga	gagaagccta	aagtgattca	atagcccagg	1800
agcacctgat	tcctttctgc	ctgcaggggg	ctgggggggt	ggggggcagt	ggatgggtgc	1860
ctatctgggt	agaggtagtg	tgagtgtggt	gtgtgctggg	gatgggcagc	tgccgctgcc	1920
tgctcggccc	ccagccacac	cagcccaaaaa	tacagctggg	ctgaaacctg	atccctgtct	1980
gtctggcctg	ctcaaaagcgg	cagggctccct	gacgcctggc	tctctcccca	ccccattggc	2040
cagatcgggt	cacccctctac	cactcccggg	acaggatgca	aaagagggctc	cagagtcaga	2100
gtgccaagcc	aggggaatccc	agtcacagac	tcagagcccg	ggcctgcact	ttgccccctg	2160
cccttgatca	accccaactgc	cccaaccagag	ctgccagggt	ggcacagggc	cctgtccagc	2220
ccctggcaca	cacttccctg	ccaggcctca	gcctctagca	taagctccag	agagccaggg	2280
cccatcagtt	tctctctgtg	gatttgtatc	tcagctccat	gatgcctgtg	gctttctgtc	2340
tcctcaacaa	gagtgacgt	tgctgaatgt	cagctgcctg	agagagctgg	ggcctgactt	2400
actaggggat	taaatcctaa	gaggctctac	tgaggtgtgg	gcagatcaca	ggccagtgga	2460
aaaagggcag	gtcagatggg	caaggccagc	gactttcaga	ttaactgaga	ggatatcgag	2520

gccaaagcatg	gcaggggggaa	ggtcagtgagg	tgtcaagaga	cccaggtctg	accccgagatg	2580
tttgctccat	gtgacaaaag	caggcctgtc	tcaggacott	ttctttttct	ttttcctctc	2640
tttttttttt	gacacggagt	ttcgctcttg	ttgtccaggc	tagagtgcac	tggcatgatc	2700
ccagctcacc	gcaacgtcta	cctcccagg	tcaaatcatt	ctcttgcttc	agactccgga	2760
gtagctggga	ttacaggcac	atgccaccat	gcctggctaa	ttttgtatat	ttagttagaaa	2820
cagggtttca	ccatgctggc	catgctgggt	ctcgaaactcc	tgaactcagg	tgttccacct	2880
acctcagcct	cccaaagtgc	tgggggttaca	gggtgtgagcc	atcgcgctcg	gccaggacct	2940
ttgtttcttta	ttacacattt	ggaagatttg	gtcctgatgt	cctttgaggc	ttcttttagct	3000
ctagtctctc	gacacttcag	cctatatcac	agctaaacttc	ytcagttctca	tctattcctt	3060
atgctccagc	ccttgccaat	ttgcctcaag	atggggggtt	gaaaataaact	ttacctgact	3120
caaggagtgt	ctggagcacc	tcttagtcta	agtctgcaag	ctccagttct	tgccataaac	3180
catgccagtg	gccacccttg	ggctcagaca	gctctgggccc	ttttgaccac	aagccagccc	3240
ctcgccctct	ctgtggcata	gtcttctctg	ccccaggact	gcaggggcgcc	ttcctccaag	3300
gcttccaagg	ctcaaaaagaa	atttggctcc	atccaagaag	gctccagctc	ccctactggc	3360
ccctggcttc	agggccacac	ccctggggcca	ggscacagaga	gtgtgtctca	ggagaattca	3420
atgggctcta	gagagacaca	cagaaagtgt	gggcattttgg	gaaattttca	aggrtgtatg	3480
tatggytcac	gtatggwgca	ggttgtcctg	gtccykgggt	gcagggaagt	gggtgtcagg	3540
gaagtggatt	ggaggggagc	tttaggaata	taaggagcgg	gggtggagac	ctaggctatg	3600
gacaaggaca	ggcccaaggt	tgggaagacc	tgcccttagt	cgctcctcagc	ctaggggcagg	3660
gcagtgaaga	aagctctccc	cgctcctgct	gtaatgaccc	agagtgcctc	ccccaggccg	3720
gcactcttat	tgtgtcttcc	accatcctca	tggtggcact	ttctaggcc	tgtctcccag	3780
catgtgtcga	gggtcggaag	agaaccagga	agtgaacctg	gggtgaaaca	gaaagctcaa	3840
tggattggct	aggttcccag	atcattaggg	cagagtttgc	acgtcctctc	gttccactggg	3900
aatccaccaca	ggccacgaat	catctccctc	tttgaaggat	ttttattctc	actgggtttt	3960
ggaacaaact	cctgctgaga	ccccacagcc	agaaactgaa	agcagcagct	ccccaaagcc	4020
tgaaaaatcc	ataagagaag	gcctgggggga	maggaaktgg	agtgcacagg	gacaggtaga	4080
gagaaggggg	cccaatggcc	agggagtga	ggaggtggcg	ttgtctgagc	cagctctgcac	4140
atgctctctgt	ctgagtgca	gaaggtgttc	cagggtcgaa	attacacttc	tcgtacctgg	4200
agacgctgtt	tgtgggagca	ctgggctcat	gctctggcaca	caataggctt	gcaataaacc	4260
atggttaaat	cctgaaaaaa	aaaaaaaaa				4289

<210> 28
 <211> 1592
 <212> DNA
 <213> Homo sapiens

<400> 28						
tatgtccacc	aaagacacct	cggtgggtcat	gttctatcac	ctcttcgtca	aattgacatc	60
aggtcctaac	aggtcacttt	caagatacac	aagaggcaaa	ttttgttttg	agacttggcc	120
attcctaggg	tcagcaaagt	gtattcctcg	cagccagacc	ttcagtcact	tatcaggaaa	180
tgcttgacct	aaagacagac	aattccttcc	ccaaactttg	ctgtttcttt	tttgagtctt	240
tgttgaaaga	tttcttttaa	aaggcggtcg	tgtgagaaga	tcacagcaac	aaatctggct	300
tgtttctgtt	tagactttact	ttcttaactc	ttgggcagaa	gaaaatgaat	gagatttgaa	360
gacctttgat	accttgggta	gacaaagctt	gccttgaaac	tagaataaag	acgaaactag	420
attttaaggg	gaaaaaattt	gctagtggta	atataaattg	ttttgtttca	tttttttatg	480
agctctgagg	gttgacctta	acgcttggga	tggtgctttg	ttaatgaagt	catttcaatt	540
tttgcaactc	ttaacatctg	catgcttcca	taaacagctg	gttggaaaca	aagaaaaatg	600
gactaaggga	tattccttaa	attccttttt	atggttatgag	agagaatatt	ggaatatata	660
gaattgttact	ttatctggta	aaccacttca	tgtgccagaa	gcactaacag	tttgaatggg	720
tggtcttaaaa	aaaaacggga	gtccttgaat	ttaagcttat	gtaaaaattac	tatgcataata	780
taggttatta	tttattttta	cagtgaanaa	aaaacactat	tgaagtataa	atggaaaaga	840
aataaaaagca	aagcctgttt	aatatagaga	cattaatgtt	gatatcactg	tacgaacagt	900
catagcttgc	tgtctcactgc	cggttaaagg	ttgacataca	aacatttggg	aagagatttc	960
agttttgagg	ctagtgtctg	aattatggac	tccttaacct	actccaccac	ttaaaaacatt	1020
ttagagactt	tgtgtaaat	aacaggctcat	ataattataa	attgttggtt	tatgtacatt	1080
tattgaaagg	ccatatttag	gtccattga	ttttttttcc	tgcattttta	ctagtatcga	1140
attgaaaaat	tgaaccttca	gtgtttactg	atggaaatct	acaaaaaagt	agcaagggtt	1200
acgaatgggt	ggatttattg	gtgattaaac	atttttttcc	tgtattttat	aagtttcaca	1260
ttacattttac	aatgagaaaa	aaatgttaaa	gtagaattaa	agtccttgta	atatcgtaat	1320
ttgcctattg	ctgtactaaa	agaagcttct	ataaaaatga	tcattctcat	ccttagattc	1380
aggccagaaa	gtaactttca	gtgttaggta	tttgaaataa	tgcagccctg	catatgtact	1440

ctggttacca	gaatgaaaaa	acaaaaagag	atacatatcat	agtaaggaaa	catgaaattg	1500
gaggaattga	tccccatgtg	tattgcagct	tcataatacca	gtagtctcta	ataagtcatt	1560
gctttaataa	aaaaaaaaat	agaaaattta	aa			1592

<210> 29
 <211> 1234
 <212> DNA
 <213> Homo sapiens

<400> 29						
tatttttcta	cgtaaaaatga	ttctattatg	actgcctttg	catgtagtaa	tatgacaaaag	60
tgatccttca	ttatcacggg	acactattgt	ttacttttca	tctgtaaatg	ttttattgtt	120
acttttttaa	aatgaatttt	tttaaaacaa	tctagccatc	atcaagggtgc	tataagagtt	180
gtataaaaaga	tatttttggc	atttctaggc	aagtatcagc	caataagtat	gttagtgata	240
tcacagattg	taccaactat	taactatgtt	aaataagtat	tcagtttcat	gtgatctctg	300
ggaaaaaaat	atgctgcctt	gggtgctaata	ttgtagtgat	ttaaatgac	atctgactca	360
gaaatataaa	cacttttaaat	gaaagggagg	aacggaagga	caatttccag	tgcacagaaat	420
cacttggatg	aaataagacc	agctctttac	ccttattttt	ggatatgcct	tttttggaaag	480
agacttagac	tttatcctta	ttgttgttag	tggtgttaaat	attcgttgct	tcagccacag	540
gtgccttggg	ctctccacaa	tcaaatggag	gatcccccaa	gcagcttcat	tacagagtga	600
tattgggaaa	gtgagatcct	ctcaccattt	tgccaagata	ctctaaaatg	acatccaagt	660
ttaccagtga	aaagacacag	gatgcacaga	atgggcatga	ccttcagctc	acgagcacac	720
ctggagaaat	tcagaaccag	gttctgaatc	atcacgattg	ccttttgcat	gaaaacatcg	780
gctgggtgatg	tgacttctct	tcaggccatg	agcctaacay	cctgcgcgtt	ttcatgcccg	840
ctgcagtaat	ggacgcttgg	gtgaagaaat	gaactgtgga	gtacaaaatg	ccttgagtct	900
ttccgattgc	tcattaatcc	acttttttgt	tacttctttc	caaaaatggaa	gtgctgaagc	960
catgggtcttt	ctgcccctcc	aagctgatga	aggggaagcct	ttgccaatgg	cccatggaaag	1020
acacttgggt	tgagaaaccc	tgcccacttc	caaagaccaa	agagattagg	aaaagcctgg	1080
cagtattctc	caactcctaa	caagctctag	agtgtccag	gaaaagttaa	attcagtata	1140
tgaataagtg	ttattctcca	ttattaatgt	gttctgaaaa	tatatattga	ataaatatcat	1200
caccacaccc	aaaaaaaaaa	aaaaaaaaaa	aaaa			1234

<210> 30
 <211> 165
 <212> DNA
 <213> Homo sapiens

<400> 30						
atggaatgga	atggaatggc	atggaatcgt	ataaagtgga	atggaatcaa	ctcgagtgga	60
atggaatgga	atggaatgga	atggaatgca	gtacaatgca	atagaatgga	atggaatgaa	120
ctcgagtgga	ctggaatgga	atggaatgga	atgcatttga	attga		165

<210> 31
 <211> 1041
 <212> DNA
 <213> Homo sapiens

<400> 31						
ctaaagatct	ccctccaggc	agcccttggc	tggtccctgc	gagccctggtg	agactgccag	60
agatgtcctc	tttcggttac	aggacccctga	ctgtggccct	cttcaccctg	atctgtctgc	120
caggatcgga	tgagaaggtg	ttcgaggtag	acgtgaggcc	aaagaagctg	gcggttgagc	180
ccaaaagggtc	ctcgagggtc	aactgcagca	ccacctgtaa	ccagcctgaa	gtgggtgggtc	240
tgggagacctc	tcataaatag	attctgtctg	acgaacaggc	tcagtggaaa	cattacttgg	300
cttcaaacaat	ctcccattgac	acggtctctcc	aatgccactt	cacctgtctc	gggaagcagg	360
agtcaatgaa	ttccaaacgtc	agcgtgtacc	agcctccaag	gcagggtcatc	ctgacactgc	420
aacccacttt	gggtggctgtg	ggcaagtcct	tcaccattga	gtgcagggtg	cccaccctgg	480
agccccctgga	cagcctcacc	ctcttctctg	tcctgtggcaa	tgagactctg	cccatgaga	540
ccttcgggaa	ggcagccctt	gctccgcagg	aggccacagc	cacattcaac	agcagcgtg	600
acagagagga	tggccaccgc	aacttctctc	gcctggctgt	gctggacttg	atgtctcgcg	660
gtggcaacat	ctttcacaaa	cactcagccc	cgaaagatgt	ggagactctat	gagcctgtgt	720
cggacagcca	gatggtcatc	atagtcacgg	tggtgtcgtg	gttgctgtcc	ctgttctgtga	780

catctgtcct	gctctgtctt	atcttcggcc	agcacttgcg	ccagcagcgg	atggggacct	840
acgggggtgcg	agcggttg	aggaggtgc	cccaggcctt	ccggccatag	caaccatgag	900
tgccatggcc	accaccagcg	tggtcactgg	aactcagtg	gactcctcag	gggtgaggtc	960
cagccctggc	tgaaggactg	tgacaggcag	cagagacttg	ggacattg	ttttctagcc	1020
cgaatacaaa	cacctggact	t				1041

<210> 32
 <211> 4000
 <212> DNA
 <213> Homo sapiens

<400> 32						
gcacgatctg	ttctctctgg	gaagatgcag	aggctcatga	tgctcctcgc	cacatcgggc	60
gctgtcctgg	gctgtctggc	agtggcagca	gtggcagcag	caggtgctaa	ccctgcccaa	120
cgggacaccc	acagcctgct	gcccaccac	cggcgccaaa	agagagattg	gatttggaac	180
cagatgcaca	ttgatgaaga	gaaaaacac	tcacttcccc	atcatgtagg	caagatcaag	240
tcagcgtga	gtcgcaagaa	tgccaagtac	ctgctcaaag	gagaaatatg	gggcaaggtc	300
ttccgggtcg	atgcagagac	aggagacgtg	ttcgccattg	agaggctgga	ccgggagaa	360
atctcagagt	accactcac	tgctgtcatt	gtggacaagg	acactgtgga	aaacctggag	420
actccttcca	gcttcacat	caaagtctat	gacgtgaacg	acaactggcc	tgtgttcacg	480
catcggttgt	tcaatgcgtc	cgtgcctgag	tcgtcggctg	tggggacctc	agtcattctt	540
gtgacagcag	ttgatgcaga	cgaccccaat	gtgggagacc	acgcctctgt	catgtaccaa	600
atctcgaagg	ggaaagagta	ttttgccatc	gataattctg	gacgtattat	cacaataacg	660
aaaagcttgg	accgagagaa	gcaggccagg	tatgagatcg	tggtggaagc	gcgagatg	720
cagggcctcc	gggggggactc	gggcacggcc	accgtgctgg	tcactctgca	agacatcaat	780
gacacattcc	ccttcttccac	ccagaccaa	tacacatttg	tcgtgcctga	agacacccgt	840
gtgggcacct	ctgtgtgtctc	ttctgtttgt	gaggagcccg	atgagcccca	gaaccggatg	900
accaagtaca	gcattcttgcg	gggcgactac	caggacgctt	tcaccattga	gacaaacccc	960
gccacacaag	agggtcatcat	caagcccatg	aagcctctgg	attatgaata	catccagcaa	1020
tacagcttca	tcgtcgaggc	ccagaccccc	accatcgacc	tcggatcacat	gagccctccc	1080
gcgggaaaaca	gagcccaggt	cattatcaac	atcacagatg	tgagcagagc	ccccatttct	1140
cagcagcctt	tctaccattt	ccagctgaag	gaaaaccaga	agaagcctct	gattggcaca	1200
gtgctggcca	ttgacctgta	tcgcgtcagg	catagcattg	gatactccat	ccgcaggacc	1260
agtgaacaag	gccagttctt	ccagctcaca	aaaaaggggg	acatttacaa	tgagaagaag	1320
ctggacagag	aagtctaccc	ctggtataac	ctgactgtgg	aggccaaaga	actggattcc	1380
actggaaccc	ccacaggaaa	agaatccatt	gtgcaagtcc	acattgaagt	tttggatgag	1440
aatgacaatg	ccccggagtt	tgccaagccc	taccagccca	aagtgtgtga	gaacgctgtc	1500
catggccagc	tggtcctgca	gatctccgca	atagacaagg	acataaacac	acgaaacgtg	1560
aagtccaat	tcaccttgaa	tactgagaac	aactttaccc	tcacggataa	tcacgataac	1620
acggccaaca	tcacagtcac	gtatgggcag	tttgaccggg	agcataccaa	ggtccacttc	1680
ctacccgtgg	tcactctcaga	caatgggatg	ccaagtgcga	cggggccagg	cacgctgacc	1740
gtggccgtgt	gcaagtgcaa	cgagcagggc	gagttcacct	tcgtcgagga	tatggccg	1800
caggtggggc	tgagcatcca	ggcagtggtg	gccatcttac	tcgtcatcct	caccatcaca	1860
gtgatcaccc	tgctcatctt	cctgcggcgg	cggctccgga	agcaggcccg	cgcgcacggc	1920
aagagcgtgc	cggagatcca	cgagcagctg	gtcacctacg	acgaggaggg	cggcgccgag	1980
atggacacca	ccagctacga	tggttcgggtg	ctcaactcgg	tcgcgcgcgg	cggggccaa	2040
cccccgccgc	ccgcgtgga	cgcccgccct	tcctctctatg	cgaggtgca	gaagccacgc	2100
agggcacgcg	ctggggcaca	cggaggggccc	ggggagatgg	cagccatgat	caggtggaag	2160
aaggacaggg	cggaccacga	cggcgacggc	ccccctacg	acacgctgca	catctacggc	2220
tacgagggct	ccgagtcac	agccgagtc	ctcagctccc	tgggcaccca	ctcatccgac	2280
cttgacgtgg	attacgactt	ccttaacgac	tggggaccaca	ggtttaagat	gctggctgag	2340
ctgtacggct	cggagccccg	ggagagcgtg	ctgtattagg	cggccgaggt	cactctgggc	2400
ctggggaccc	aaacccccctg	cagcccgaggc	cagtcagact	ccaggaccca	cagcctccaa	2460
aaatggcagt	gactccccag	cccgacaccc	cttcctctgtg	gggtccagag	acctctcag	2520
ccttgggata	gcaaaactcca	ggttctctgaa	atatccagga	atatatgtca	gtgatgacta	2580
cttctcaaatg	ctgggcaaatc	caggtctggtg	ttctgtctgg	gctcagacat	ccacataaac	2640
ctgtcaccca	cagaccgcgc	ttctaactcaa	agacttctct	tggtcccca	aggtctgcaa	2700
gcaaaacaga	ctgtgttttaa	ctgtctcagg	gtctttttct	agggctccctg	aacgccccgg	2760
taaggctggt	gaggtcctgg	tgccctactg	cctggaggca	aaggcctgga	cagcttgact	2820
tggtgggcag	gattctctgc	agcccatcc	caaggggagac	tgaccatcat	gcctctctct	2880
gggagcccta	gccctgctcc	aactccatcac	tccactccaa	gtgccccacc	actccccaac	2940

cctctccag	gcctgtcaag	agggaggaag	gggccccatg	gcagctcctg	accttgggtc	3000
ctgaagtgc	ctcactggcc	tgccatgcca	gtaactgtgc	tgtactgagc	actgaaccac	3060
attcagggaa	atgcttatta	aaccttgaag	caactgtgaa	ttcattctgg	aggggcagtg	3120
gagatcagga	gtgacagatc	acagggtgag	ggccacctcc	acacccaccc	ccctctggaga	3180
aggcctggaa	gagctgagac	cttgcttga	gactcctcag	cacccctcca	gttttgcctg	3240
agaaggggca	gatgttcccg	gagatcagaa	gacgtctccc	cttctctgcc	tcacctgggtc	3300
gccaatccat	gctctcttct	ttttctctgt	ctactcctta	tcctctggtt	tagaggaaac	3360
caagatgtgg	cctttagcaa	aactgacaat	gtccaaaccc	actcatgact	gcatacgga	3420
gccgagcatg	tgtctttaca	cctcgctgtt	gtcacatctc	agggaaactga	ccctcaggga	3480
caccttgcag	aaggaaggcc	ctgcctgtcc	caacctctgt	ggtaacccat	gcatacttcc	3540
actggaacgt	ttcactgcaa	acacaccttg	gagaagtggc	atcagtcaac	agagaggggc	3600
agggaaaggag	acaccaagct	caccttctgt	catggaccga	ggttcccact	ctggcaaaagc	3660
ccctcacact	gcaagggtat	gtagataaca	ctgacttgtt	tgttttaacc	aataactagc	3720
ttcttataat	gattttttta	ctaagtatac	ttacaagttt	ctagctctca	cagacatata	3780
gaataagggt	ttttgcataa	taagcaggtt	gttatattag	ttacaatat	taattcaggt	3840
tttttagttg	gaaaaacaat	tctgttaacc	ttctattttc	tataattgta	gtaattgtctc	3900
tacagataat	gtctatatat	tggccaaact	ggtgcatgac	aagtactgta	tttttttata	3960
cctaataaaa	gaaaaatctt	tagcctgggc	aacaaaaaaa			4000

<210> 33
 <211> 3432
 <212> DNA
 <213> Homo sapiens

actccagcgc	gcggctacct	acgcttgggtg	cttgctttct	ccagccatcg	gagaccagag	60
ccgcccctcc	tgctcgagaa	aggggctcag	cggcggcgga	agcggagggg	gaccaccgtg	120
gagagcgcg	tcccagcccg	gccactgcgg	atccctgaaa	ccaaaaagct	cctgctgctt	180
ctgtaccctg	cctgtccctc	ccagctgcgg	agggccctct	cgtgggatca	cgaccgggaa	240
gacagggatg	gagaggccct	tgctgtccca	cctctgcagc	tgccctggcta	tgctggccct	300
cctgtccccc	ctgagctctg	cacagtatga	caagctggccc	cattaccctg	agtacttcca	360
gcaaccggct	cctgagtatc	accagcccca	ggcccccgcc	aactgtggca	agattcagct	420
gccctctggc	gggcagaaga	ggaagcacag	cgaggggccg	gtggagggtg	actatgatgg	480
ccagtggggg	accgtgtgcg	atgacgactt	ctccatccac	gctgcccacg	tcgtctgcgc	540
ggagctgggg	tatgtggagg	ccaagctctg	gactgcccag	tcctcctacg	gcaagggaga	600
agggcccatc	tggttagaca	atctccactg	tactggcaac	gaggcgacc	ttgcagcatg	660
cacctccaat	ggctggggcg	tcactgactg	caagcacacg	gaggatgtcg	gtgtgggtgt	720
cagcgacaaa	aggattcctg	ggttcaaat	tgacaattcg	ttgatcaacc	agatagagaa	780
cctgaatatc	cagggtggag	acattcggat	tcgagccatc	ctctcaacct	accgcaagcg	840
caccccatg	atggaggggc	acgtggaggt	gaaggagggc	aagacctgga	agcagatctg	900
tgacaagcac	tggaaggcca	agaattcccg	cgtggctctg	ggcatgtttg	gcttccctgg	960
ggagaggaca	tacaatacca	aagtgtacaa	aatgtttgcc	tcacggagga	agcagcgcta	1020
cctggccattc	tccatggact	gcaccggcac	agaggccac	atctccagct	gcaagctggg	1080
ccccaggtg	tcactggacc	ccatgaagaa	tgtcacctgc	gagaatgggc	tgccggccgt	1140
gggtgagttg	gtgctctggc	aggtctctag	ccttgacgga	ccctcgagat	tccggaagac	1200
atacaagcca	gagcaacccc	tgtgtcgact	gagaggcggt	gctacatcg	gggagggccg	1260
cgtggagggtg	ctcaaaaatg	gagaatgggg	gaccgtctgc	gacgacaagt	gggacctggt	1320
gtcgggccagt	gtgggtctga	gagagctggg	ctttgggagt	gccaagaagg	cagtcactgg	1380
ctcccgactg	gggcaaggga	tcggaccat	ccacctcaac	gagatccagt	gcacaggcaa	1440
tgagaagtcc	attatagact	gcaagttcaa	tgccgagtct	cagggctgca	accacaggga	1500
ggatgctggt	gtgagatgca	acacccctgc	catgggcttg	cagaagaagg	tgcgcttgaa	1560
cggcggccgc	aatccctacg	agggccgagt	ggagggtctg	gtggagagaa	acgggtccct	1620
tgtgtggggg	atggtgtgtg	gccaaaaactg	gggcatcgtg	gaggccatgg	tggtctgccc	1680
ccagctggcg	ctgggattcg	ccagcaacgc	cttccaggag	acctgttatt	ggcacggaga	1740
tgtcaacagc	aacaaagtgg	tcatgagtgg	agtgaagtgc	tcgggaacgg	agctgtccct	1800
ggcgcactgc	cgccacgacg	gggaggacgt	ggcctgcccc	cagggcgagg	tgcastacgg	1860
ggccggaggt	gctctctcag	aaaccgcctc	tgacctggtc	ctcaactcg	agatggtgca	1920
gcagaccacc	tacctggagg	accggcccat	gttcatgctg	cagtgtgcca	tggaggagaa	1980
ctgcctctcg	gctctcagcg	cgcagacgga	ccccaccacg	ggctaccgcc	ggctcctgcg	2040
cttctctccc	cagatccaca	acaatggcca	gtccgacttc	cggcccaaga	acggcccgca	2100
cgcgtggatc	tggcacgact	gtcacaggca	ctaccacagc	atggagggtg	tcacccacta	2160

tgacctgctg	aacctcaatg	gcaccaaggt	ggcagagggc	cacaaggcca	gcttctgctt	2220
ggagggacaca	gaatgtgaag	gagacatcca	gaagaaattac	gagtggtgcca	acttcggcgg	2280
tcagggcatac	aacatgggtc	gctgggacat	gacggcccat	catcatgcgt	gcaggtgggt	2340
tgacataact	gacgtgcccc	ctggagacta	cctgttccag	gtgtgtatta	accocaaact	2400
cgaggtttgca	gaatccgatt	actccaacaa	catcatgaaa	tcaggagacc	gctatgacgg	2460
accaccgatac	tgtagttaca	actgcacatc	actggtgttc	tcacgggaag	agacggaaaa	2520
aaagtttgag	cacttcagcg	ggctcttaaa	caaccagctg	tccccgcact	aaagaagcct	2580
ggtgtgtccta	ctcctgtctt	caggcccaac	cacatcttc	atgggacgt	cccccaacaa	2640
ctgagttctga	acgaatgcc	cgtgcctca	cccagcccg	ccccaccct	gtccagaccc	2700
ctacagctgt	gtctaaagtc	aggaggaaaag	ggagccttcc	atcattatct	gggggtgctg	2760
acctgacct	tggggctcga	gaaggccttg	gggggtgtgg	gtttgtccac	agagctgctt	2820
gagcagcacc	aagagccagt	cttgaccggg	atgaggccca	cagacaggtt	gtcatcagct	2880
tgctccattc	aagccacata	gctcaccaca	gacacagttg	agccgcgctc	ttctccagtg	2940
actcgtggac	aaatgcgggc	tcatacgccc	cccacagagc	ggtcaggcgc	aacccattt	3000
ctctctctct	taggtcaatt	tcagcaaaat	tgaatatcta	gacctctctt	ccaatgaaac	3060
ctcccgactt	attatagcta	catagataat	ggtgccacgt	gttttctgat	ttggtagact	3120
cagacttggt	gcttccctct	ccacaacccc	cacccctctt	ttttcaagat	actattatta	3180
tattttcaaca	gaacttttga	gcacaatttt	atttggcatt	aatattggac	atctgggccc	3240
ttggaagtac	aaatctaata	aaaaaaccaac	ccactgtgta	agtgaactac	ctctctgttg	3300
ttccaattct	gtgggttttt	gattcaacgg	tgctataaac	agggtctcgg	gtgaacgggc	3360
gctcactgag	caccatgtgt	catacacagc	acctacaact	acttgaactt	tggaataaaa	3420
gaaagattta	tg					3432

```
<210> 34
<211> 3845
<212> DNA
<213> Homo sapiens
```

<400> 34										
gtctc	ggctcgccctg	ggctcgccctc	tggagtagtg	tctggcgggt	gccccttctc					60
ccccta	tctctctctt	ggcttctcat	gtgggcgcgg	cggtagacct	gacgtgtgtg					120
ctctgc	ggctcaacga	ccccacgcgc	tcttctctga	cttgctgtctg	tggggagacc					180
gggga	ggggctcggg	cgctctgggg	cgccctctgc	tgtctggaga	ggcgagcgt					240
gcgcga	ccccgcggcg	gccaccctct	cgctctggcg	gcaacgggtc	gcaccaggtc					300
ctcgcg	gcttctccaa	gcccctcgac	ctgtctggcg	tcttctctct	cgtggggcgt					360
ggcgcg	ggcgacacgc	cgctcatctac	ctgcacaaac	ggcctggagc	ccactcgtt					420
caagg	tcacacacac	tgtgaacaaa	ggtgacacgc	ctgtacttct	tgacgtgtg					480
gggga	agcacacaga	cgtgatctgg	aagagcaacg	gataccttct	ctacaccctg					540
gcgatg	aagccacaga	tgggcggctt	ctgtctgacg	tcccaaatgt	gcagccacca					600
cggga	tctacagtg	cactttactg	gaagccagcc	ccctgggcgc	cgctctcttt					660
catcg	tgcgggggtg	tggggctggg	cgctgggggg	caggctgtac	caaggagtgc					720
ttggcc	tacatggagg	tgtctgcac	gacctagcag	gcgaatgtgt	atgccccctt					780
caactg	gcacccgctg	tgaacacggc	tgcagagagc	gcggttttgg	gcagagctgc					840
gcagtg	gccccggcat	atcacggtgc	cggggcctca	cctctgcctc	cccagacccc					900
cttgtct	cttgtggatc	tggctggaga	gggaagccagt	gccaagaagc	ttgtgccctt					960
tttttg	gggctgatty	ccgactccag	tgcagtgctg	agaatggttg	cactttgtac					1020
catgtg	gttgtgtctg	ccoctctggg	tggcattgag	tgcactgtga	gaagtgcagc					1080
cccccc	agatctctaa	catggcctca	gaactggagt	tcaacttaga	gacgatgcc					1140
ccaact	gtgcagctgc	agggaaacct	ttccccgtgc	ggggcagcat	agagctacgc					1200
gaagag	gcaactgtgt	ctgtctccac	aaggccctgt	tggagccaga	gaagaccaca					1260
gttttg	aggtgccccg	cttggttctt	gcggacagtg	ggttctggga	gtgccgtgtg					1320
gatctg	gcggcccgag	cagccggcgc	ttcaagtgta	atgtgaaagt	gcccccgctg					1380
ggcgctg	cacccctggg	ccctgaccaa	tcagagccgc	agcttgtggt	ctccccgctg					1440
ggtttct	ctgggggatg	accatctctc	actgtctcgc	tgcaactacg	gccccaggac					1500
tcgatg	actggtcgac	catgttgtgt	gaccctcagt	agaacgtgac	gtaaatgaac					1560
gggcoaa	agacagagata	cagttgttgg	tgtgcagctga	gccggccagg	ggaaggagga					1620
gggctct	ggggggctccc	cacctctcgt	accacagact	gtctctgagc	tttgtgtcag					1680
gtgttg	agggctcgcc	tgtggaaggc	actgaccgcg	tcgagtgatg	ctgtctcttg					1740
rggttg	ccggggccact	ggtggggcgac	ggtttctctg	tgcgctctgt	ggacgggaca					1800
ggcgagg	agcgggcgga	gaacgtctca	tccccccagg	cccgcactgc	cctctctcag					1860
ccacgc	ctgqacccca	ctaacagctg	gatgtgcagc	tctaccactg	cctccctgctg					1920

ggccccggcct	cgccccctgc	acacgtgctt	ctgcccccca	gtggggcctcc	agccccccga	1980
cacctccacg	cccaggccct	ctcagactcc	gagatccagc	tgacatggaa	gcaccggag	2040
gctctgctgc	ggccaatatt	caagtaacgtt	gtggagggtgc	agggtggctgg	gggtgcagga	2100
gaccactagt	ggatagacgt	ggacaggcct	gaggagacaa	gcaccatcat	ccgtggcctc	2160
aacgcgcagca	cgcgctacct	cttcgcgatg	cgggccagca	ttcaggggct	cggggactgg	2220
agcaaacacag	tagaagagtc	caacctggggc	aacgggctgc	aggctgaggg	cccagtccaa	2280
gagagccggg	cagctgaaga	ggggctggagt	cagcagctga	tcctggggct	gggtgggctcc	2340
gtgtctgcaga	cctgcctcac	catcctggccc	gcccttttaa	ccctgggtgtg	catccgcaga	2400
agctgctctgc	atcggagacg	caccttcacc	taccagtcag	gctcggggcga	ggagaccatc	2460
ctgcagttca	gctcaggggac	cttgacactt	acccggcggc	caaaaactgca	gcccagagccc	2520
ctgagctacc	cagtgctaga	gtgggaggac	atcacctttg	aggacctcat	cggggaggggg	2580
aacttcgggc	aggtcatccg	ggccatgatc	aagaaggacg	ggctgaagat	gaacgcagcc	2640
atcaaaatgc	tgaagagatg	tgccctctgaa	aatgaccatc	gtgactttgc	gggagaactg	2700
gaagtctctgt	gcaaattggg	gcatcacccc	aacatcatca	acctctctgg	ggcctgtaag	2760
aaccgaggtt	acttgtatat	cgctatttaa	tatgccccct	acgggaacct	gctagatttt	2820
ctgcggaaaa	gcccgggtcct	agagactgac	ccagcttttg	ctcgagagca	tgggacagcc	2880
tctaccctta	gctcccggca	gctcgtcggt	ttcgccagtg	atgcccgcga	tggcatgcag	2940
tacctagtg	agaagacagt	catccacagg	gacctggctg	cccgggaagt	gctggctcga	3000
gagaacctag	ctcccaagat	tgagacttcc	ggcctttctc	ggggagagga	gggttatgtg	3060
aagaagacga	tggggcgctct	ccctgtgcgc	tggatggcca	ttgagtccct	gaactacagt	3120
gtctatacca	ccaagagtga	tgtctgggtc	tttggagtc	ttctttggga	gatagtgage	3180
cttggaggta	cacctactgc	tgccatgacc	tgtgcccagc	tctatgaaaa	gctgcccacg	3240
ggctaccgca	tggagcagcc	tcgaaactgt	gacgatgaag	tgtacgagct	gatgcgtcag	3300
tgctggcggg	accgtcccta	tgagcgaccc	ccctttgccc	agatgtcgct	acagctagge	3360
cgcagtctgg	aagccaggaa	ggcctatgtg	aacatgtcgc	tgtttgagaa	cttcacttac	3420
gcgggcattg	atgccacagc	tgaggaggcc	tgagctgcca	tccagccaga	acgtggctct	3480
gctggccgga	gcaaacctgt	ctgtctaaac	tgtgaccagt	ctgaccttta	cagcctctga	3540
cttaagctgc	ctcaaggaa	ttttttaact	taaggaggaa	aaaaagggat	ctggggatgg	3600
gggtgggctta	ggggaaactg	gttcccactg	tttgtaggtg	tctcatagct	atcctgggga	3660
tcctctcttc	tagttcagct	gccccacagg	tgtgtttccc	atcccactgc	tccecaaca	3720
caaaccccca	ctccagctcc	ttcgcttaag	ccagcactca	caccactaac	atgcctctgt	3780
cagctactcc	cactcccggc	ctgtcattca	gaaaaaata	aatgttctaa	taagctccaa	3840
aaaaa						3845
<210> 35						
<211> 1645						
<212> DNA						
<213> Homo sapiens						
<400> 35						
gggattcggg	cgcgccagct	acggggaggac	ctggagtggc	actggggcgcc	cgacggacca	60
tcccggggac	ccgcctgccc	ctcggcgccc	cgccccgcgc	ggccgctccc	cgtcgggttc	120
cccagccaca	gccttaccta	cgggctcctg	actccgcaag	gcttcacgaa	gatgctcgaa	180
ccaccggcgc	ggggcctcgg	gcagcagtag	gggaggcgct	cagcccccca	ctcagctctt	240
ctcctcctgt	gccaggggct	ccccggggga	tgagcatggt	gggttttccc	cggagcccc	300
tggtctcgga	cgtctgagaa	gatgcggctc	atgaggctgt	tccctgtgct	ctccagctc	360
ctggccgggc	tggcgctgcc	tgctgtgccc	ccccagcagt	gggccttgct	tgctgggaac	420
ggctcgtcag	aggtggaagt	ggtacccttc	caggaaagt	ggggccgcag	ctactgccc	480
cgctcgga	ggctggtgga	cgtcgtgtcc	gagtacccca	gcgagggtga	gcacatgttc	540
agcccatcct	gtgtctccct	gctgcgctgc	accggctgct	gcggcgatga	gaatctgcac	600
tgtgtgccc	tggagacggc	caatgtcacc	atgcagctcc	taaagatccg	ttctggggac	660
cggccctcct	acgtggagct	gacgttctct	cagcacgctc	ctgcggaagt	cggcctctgt	720
cgggagaaga	tgaagccgga	aaggtgcggc	gatgctgttc	cccggaggta	accacccct	780
tggaggagag	agaccccgca	cccgctcgt	gtatttatta	ccgtcacact	cttcagtgac	840
tctctgtgt	acctgccctc	tatttatag	ccaactgttt	ccctgctgaa	tgctcgtct	900
ccttcaagac	gaggggcagg	gaaggacagg	accctcagga	attcagtgcc	ttcaacaacg	960
tgagagaag	agagaagcca	cctgggagct	cctgggagct	tcctcttga	aagaagcaag	1020
acacgtggcc	tcgtgagggg	caagctaggc	cccagaggcc	ctggaggtct	ccaggggctc	1080
gcagagggaa	agaagggggc	cctgtactct	gttcttgggc	ctcagggctc	gcacagacaa	1140
gcagcccttg	ctttcggagc	tctgtccaa	agtagggatg	cggattctgc	tggggcgccc	1200
acggcctggt	ggtgggaagg	ccggcagcgc	gcggagggga	ttcagccact	tcccctctct	1260

cttctgaaga	tcagaacatt	cagctctgga	gaacagtggt	tgctctgggg	cttttgccac	1320
tccttgtccc	cogtgatect	ccctcacact	tgccatttg	ctgtactgg	gacattgttc	1380
ttctcggcgc	agggtgccac	accctgcccc	cactaagaga	cacatacaga	gtgggccccg	1440
ggctggagaa	agagctgctc	ggatgagaaa	cagctcagcc	agtggggatg	aggtcaccag	1500
gggaggagcc	tgtgcgtccc	agctgaaggc	agtggcaggc	gagcaggttc	cccaagggcc	1560
ctggcacccc	cacaagctgt	ccctgcaggc	ccatctgact	gccaaagccag	attctcttga	1620
ataaagtatt	ctagtgtgga	aacgc				1645

<210> 36
 <211> 4829
 <212> DNA
 <213> Homo sapiens

<400> 36						
atggaggggg	accgggtggc	cgggcggcgc	gtgctgtcgt	cgttaccagt	gctactgtcg	60
ctgcagttgc	taatgttgcg	ggccgcggcg	ctgcacccag	acgagctctt	cccacacggg	120
gagtcgtggc	gggaccagct	cctgcaggaa	ggcgacgacg	taaagctcag	ccgtgggtgaa	180
gctggcgcaat	ccctctgcact	tcttacgaa	cccgattcag	caacctctac	gtggggccaca	240
acggcatcat	ctccactcag	gacttcccca	gggaaacgca	gtatgtggag	tatgatttcc	300
ccaccgactt	cccgcccatc	gccccctttc	tgccggacat	cgacacgagc	cacggcagag	360
gccgagtcct	gtaccgagag	gacacctccc	ccgcagtgct	gggcctggcc	gcccgctatg	420
tgccgctggg	cttcccgccg	tctgcgcgct	ttttaccccc	acccacgctc	tccctggccac	480
ctgggagcag	gtaggcgctt	acgaggaggt	caaacgcggg	cgctgccctc	gggagagctg	540
aacactttcc	aggcagtttt	ggcatctgat	gggtctgata	gctacgcctc	ctttctttat	600
ctcgcccaag	gctctgactg	ccttggaacc	cgccccaaag	agtcttaca	tgtccagctt	660
cagctttccg	ctcgggtggg	cttctgcgca	ggggaggctg	atgatctgaa	gtcagaagga	720
ccatatttca	gcttgactag	cactgaacag	tctgtgaaaa	atctctatca	actaagcaac	780
ctggggatcc	ctggagtgtg	ggctttccat	atcggcagca	cttccccgtt	ggacaatgtc	840
aggccagctg	cagttggaga	ccttttcgct	gcccactctt	ctgttccccct	gggacgttcc	900
ttcagctcag	ctcacgccct	ggaagtgtac	tataatgagg	acaatttggg	ttactacgat	960
gtgaatgagg	aggaagtcta	ataccttccg	ggtgaaccag	aggaggcatt	gaatggccac	1020
agcagcattg	atgtttccct	ccaatccaaa	gtggatacaa	agcctttaga	ggaatcttcc	1080
accttggatg	ctcacaccaa	agaaggaaca	tctctgggag	aggtagggag	cccagattta	1140
aaaggccaag	ttgagccctg	ggatgagaga	gagaccagaa	gcccagctcc	accagaggtg	1200
gacagagagt	cactggctcc	ttcctgggaa	acccccacc	cgtaaccgca	aaacgggaagc	1260
atccagccct	accagatgtg	aggggcagtg	ccttcggaaa	tggaatgttc	cccagctcat	1320
cctgaagaag	aaattgttct	tcgaagttag	cctgtctcag	gtcacactac	acccttaagt	1380
cgagggaagt	atgaggtggg	actgggaagac	aacataggtt	ccaacacgga	ggtcttcacg	1440
tataatgctg	ccaacaagga	aacctgtgaa	cacaaccaca	gacaatgctc	ccggcatgcc	1500
ttctgcacgg	actatgccac	tggtctctgc	tgccactgcc	aatccaagt	ttatggaaat	1560
gggaagcagt	gtctgectga	gggggcacct	caccgagtga	atgggaaagt	gagtgccac	1620
ctccacgtgg	gccatacacc	cgtgcacttc	actgatgtgg	acctgcactg	gtatatcgtg	1680
ggcaatgatg	gcagagcccta	cacggccatc	agccacatcc	cacagccagc	agccccggcc	1740
ctctctcccc	tcacaccaat	tggaggcctg	tttggtctggc	tttttctctt	agaaaaacct	1800
ggctctgaga	acggcttcag	cctcgacagt	gctgccttta	cccatgacat	ggaagtata	1860
ttctacccgg	gagaggagag	ggttcgtatc	actcaaatgt	ctgagggact	tgaccagag	1920
aactacctga	gcatttaagac	caacattcaa	ggccaggtgc	cttactgtcc	agcaaatctc	1980
acagcccaca	tctctcccta	caaggagctg	taccactact	ccgactccac	tgtgacctct	2040
acaagtttca	gagactactc	tctgactttt	ggtgcaatca	accaaacatg	gtcctaccgc	2100
atccaccaga	acatcactta	ccagggtgtg	aggcacgccc	ccagacaccc	gtccttcccc	2160
accacccagc	agctgaacgt	ggaccggggt	tttgctctgt	ataatgatga	agaagagtg	2220
cttagatttg	ctgtgaccaa	tcaaatgggc	ccggtcaaa	aaagtctcaga	ccccactccg	2280
gtgaatcctt	gctatgatgg	gagccacatg	tgtgacacaa	cagcacgggtg	ccatccaggg	2340
acagggttag	attacacctg	tgagtgcgca	tctgggtacc	aggagatgg	acggaaactgt	2400
gtggatgaaa	atgaatgtgc	aactggcttt	catcgctgtg	gccccaaactc	tgtatgtatc	2460
aacttgctgt	gaagctacag	gtgtgagtg	cggagtgggt	atgagtttgc	agatgaccgg	2520
cataacttga	tcttgatac	cccactgtgc	aaccctgtg	aggatggcag	tcatactctg	2580
gtcctctgtg	ggcaggcccg	gtgtgttcac	catggaggca	gcacgttccag	ctgtgctctg	2640
ctgcctgggt	atgcggcgca	tggggcacag	tgcactgatg	tagatgaatg	ctcagaaaac	2700
agatgtcacc	ctgcagctac	actcctgggt	actcctgggt	ccttctctctg	ccgtgtgtcaa	2760
ccgggatatt	atggggatgg	atttcagtg	atacctgact	ccacctcaag	cctgacaccc	2820

tgtgaacaac	agcagcgcca	tgcccaggcc	cagtatgcct	accctggggc	ccggtttccac	2880
atcccccaat	gcgacgagca	gggcaacttc	ctgcccctac	agtgtcatgg	cagcaactgg	2940
ttctgtcgtg	gcgtgggacc	tgatggtcat	gaagtctctg	gtaccacagac	tccacctggc	3000
tccaccccg	ctcactgtgg	accatccacca	gagccccc	agagggcccc	gaccatctgt	3060
gagcgctgga	gggaaaacct	ctggtgagac	tacggtggca	cccccgaga	tgaccagtac	3120
gtgccccagt	gcgatgacct	ggggcaacttc	atccccctgc	agtgccacgg	aaagagcgac	3180
ttctgtcgtg	gtgtgggaca	agatggcaga	gaggtgcagg	gcacccgctc	ccagccaggc	3240
accacccctg	cgtgtatacc	caccgtcgct	ccaccatgg	tccggggcca	gccccggcca	3300
gatgtgaccc	ctccatctgt	gggcaccttc	ctgctctata	ctcaggggcca	gcagattggc	3360
tacttacc	tcaatggcac	cagggttcag	aaggatgcag	ctaagacctc	gctgtctctg	3420
catggctcca	taatcgtggg	aattgattac	gactgcccgg	agaggatggg	gtactggaca	3480
gatgttgctg	gacggacaat	cagccgtgcc	ggtctggaa	tgggagcaga	gcctgagacg	3540
atcgtgaatt	caggtctgat	aaccctgaa	ggacttgcca	tagaccacat	ccgcagaaca	3600
atgtactgga	cggacagtgt	cctggataag	atagagagcg	ccctgctgga	tggctctgag	3660
cgcaaggctc	tctttcacac	agatctggtg	aatccccgtg	ccatcgctgt	ggatccaatc	3720
cagggcgaat	tgtactggac	agactggaat	agagaagctc	ctaaaattga	aacgtcatct	3780
ttagatggag	aaaacagaag	aattctgata	aatacagaca	ttggattgca	caatggctta	3840
acctttgacc	tctttctata	actgctctgc	tgggcagatg	caggaacca	aaaactggag	3900
tgtaactac	ctgatgggac	tggcggcgct	gtcattcaaa	acaacctcaa	gtacctcttc	3960
agcatcgtaa	gctatgcaga	tcaactctac	cacacagact	ggaggaggga	tgggtgtgta	4020
tcagtaata	aacatagtgg	ccagtttact	gatgagatc	tccagaaca	acgtctcac	4080
ctctacggga	taactcgcag	ctacccctac	tgcccacaag	gaagaaagta	agtacagtaa	4140
tgtaaaggaa	gacttggagt	ttacaatcag	aacctggacc	ctaaagacaa	gtgactgcaa	4200
aggcaagaa	agtaaaaaag	gaattggcca	ttagacgttc	ctgacgtacc	aagatgaaca	4260
ttttgtagt	caaaaagact	tttgtgaaaa	gctgatacct	caatctttac	tactgtattt	4320
ttaaaaatga	aggtgtgtat	tgcaagttta	aaaaggtaac	agaattttta	ctgttgctta	4380
ttaaagcaac	tctctgtaaa	cattttcat	taatatttta	aagatcaaat	tcattcaact	4440
aagaattaga	gtttaagact	ctaaacctga	tttttgccat	ggattccttc	tggccaagaa	4500
attaaagcac	atgtgatcaa	tataacaata	taatcctaaa	ccttgacagt	tggagaagcc	4560
aatgcagaa	tgatgggaaa	ggaccaatta	tttatagttt	cccaacaaaa	gttctaagat	4620
tttttacctc	tgcatcagtg	catttctatt	tatatcaaaa	ggtgctaaaa	tgattcaatt	4680
tgcattttct	gatcctgtg	tgcccttata	gaagtaccac	cagaaagtaa	agtatcacat	4740
ttataaatac	caaatgtgta	acaattttta	aattttctag	attactccaa	taaagtgttt	4800
taagttttaa	aaaaaaaaaa	aaaaaaaaaa				4829

<210> 37
 <211> 2767
 <212> DNA
 <213> Homo sapiens

<400> 37						
gcggagggtg	cgtgcggggc	gcggcagccg	aacaaaaggag	cagggggcgcc	gccgcaggga	60
cccgcacc	acctcccggt	gcgcgcagc	ggcctctcgt	ctactgccac	catgaccgcc	120
aacggcacag	ccgaggcggt	gcgagatccag	ttcggcctca	tcaactcgcg	caacaagtac	180
ctgacggcg	aggcggttcg	gttcaagggt	aacgcgtccg	ccagcagcct	gaagaagaag	240
cagatctgga	cgctggagca	gccccctgac	gaggcgggca	gcgcggccgt	gtgcctgcgc	300
agccacctgg	cccgcctacct	ggcggcggac	aaggacggca	acgtgacctg	cgaagcgagc	360
gtgcccggtc	ccgactgcgc	tttccctcac	gtggcgacg	acgacggctg	ctggctcgctg	420
cagtcggagg	cgcaccggcg	ctacttcggc	ggcaccgagg	accgcttgct	ctgcttcgcg	480
cagacgggtg	ccccgcgcga	gaagtggagc	gtgcacatcg	ccatgcaccc	tcagggtcaac	540
atctacagtg	tcacccgtaa	gcgctacgcg	caoctgagcg	cgcggcgccc	cgacagagatc	600
gccgtggacc	gcgacgtgoc	ctggggcgctc	gactcgctca	tcacccctcg	cttccaggac	660
cagcgctaca	gcgtgcagac	cgccgacac	cgcttctcgt	gccacgacg	gcgcctgggt	720
gcgcgcccc	agccgggcac	ttggtacacg	ctggagttcc	gctccggcaa	ggtggccttc	780
cgcgactgcg	agggccgtta	cctggcgccg	tcggggccca	gcggcagcgt	caaggcgggc	840
aaggccacca	aggtgggcaa	ggacgagctc	tttgctctgg	agcagagctg	cgcccgaggtc	900
gtgctgcagg	cggccaacga	gaggaaacgtg	tcacgcgcgc	aggggatgga	cctgtctgctc	960
aatcaggacg	aggagaccga	ccaggagacc	ttccagctgg	agatcgaccg	cgacacacaa	1020
aagtgtgcct	tccgtaccac	cacggggcaag	tactggacgc	tgaacggcac	cgggggcgctg	1080
cagtcacacg	cctccagca	gaatgcacgc	tgctactttg	acatcgagtg	gcgtgacggc	1140
cgcatacac	tgagggcgctc	caatggcaag	tttgtgacct	ccaagaagaa	tgggcagctg	1200

gcgcgcctcgg	tggagacagc	aggggactca	gagctcttcc	tcatgaagct	catcaaccgc	1260
cccacatcatg	tgtttccgcgg	ggagcatggc	tctcatcggt	gcgcgaaggt	cacggggacc	1320
ctggacgccca	accgctccag	ctatgacgtc	tccagactgg	atttcaacga	tggcgctcac	1380
aacatcaaaag	actccacagg	caaatactgg	acgggtgggca	gtgactccgc	ggtcaccagc	1440
agcggcgaca	ctcctgttga	cttctctctc	gagttcttgc	actataacaa	ggtggccatc	1500
aaggtggggcg	ggcgctacct	gaaggggcac	cacgcaggcg	tctctgaagg	ctcggcgga	1560
accgctggacc	cgcctcgcgt	ctggggagtac	taggggccgc	ccgtctcttc	ccgcccttgc	1620
ccacatggcg	gctcctgcga	accctccctg	ctaaccctct	ctccgcgag	tgggctccag	1680
cgcggggaggc	aagccccctt	gccctttcaa	ctggaaaccc	cagagaaaac	ggtgccccca	1740
ggctctgcgcc	ctatggtact	cccaactctc	ctctcgcccg	ggttccttac	tccctcggg	1800
tcagcggctg	cggcctggcc	ctgggagggga	tttcatagtc	ccctgccttc	tgtcttgcca	1860
ggggggcagt	ctggcaacct	ttctctttga	cctcagacgt	ctctgagcct	tattctctgt	1920
caagcgctcta	agggaacggt	gggggctggg	agccctgggc	gtgtagtgt	actggaatct	1980
tttgctctctc	ccagccactt	ctcccagcgc	ccccaggaga	gctggggcaca	tgtccccaa	2040
ctgtcagtgg	ccctcccctg	tgcactgttc	cgaaaccccc	tgcttgggaa	gggaagctgt	2100
cgggagggct	aggactgaac	cttgttggtg	ttttttgggt	ggtggctgga	aacagccctt	2160
ctcccacgtg	ggagaggctc	agctcgccca	ggttccctgg	agcgccaggg	cgtgacggcc	2220
acaaggtctg	ccgcgtgcac	gttctgcata	ccttggtgtg	gcgggcgggt	aggggtgtgg	2280
gggcgctctt	cctcctgtct	cttctcttct	accctagcct	gactggaagc	agaaaatgac	2340
caaatcagta	ttttttttaa	tgaatatatta	ttgctggagg	gctccccagg	aagcctggct	2400
gtagtacga	gtgacttggc	gagggggcgt	tcagcacctt	ccccaggggg	tgcactcag	2460
ccccctcttt	ccgtcctctc	cgtccagccc	cagccctggg	cctgggctgc	cgcacactgg	2520
cgccagagccc	ctgctgtgat	tggtgtctcc	tggggctccc	gggtggatga	agccagcggt	2580
cgcccccctc	gggagctcag	gggtgagcgc	cggggccccc	ctgtgtgccg	gcctcccccg	2640
tccccaacat	gcattctact	ctgggtgtct	tggctcttta	ttttttgtaa	gtgtcatttg	2700
tataactcta	aacgcccatt	atagtacctt	caaactggaa	ataggcaaat	taaaaactc	2760
agtcttcg						2767

```
<210> 38
<211> 1284
<212> DNA
<213> Homo sapiens
```

```
<210> 39
<211> 3583
<212> DNA
<213> Homo sapiens
```

<400> 39

acttgcgctct	cgccctccgg	ccaagcatgg	ggcttcccag	gctgggtctgc	gccttcttgc	60
tcgcccgcctg	ctgctgctgt	cctcgcgctg	cggtgtgtgcc	cgagagagct	gagcagcctg	120
cgcttgagct	ggtggaggtg	gaagtgggca	gcacagccct	tctgaagtgc	ggcctctccc	180
agtcccaagg	caacctcagc	catgtcgact	ggttttctgt	ccacaaggag	aagcggacgc	240
tcattctccg	tgttcgcccc	ggccaggccc	agagcgaacc	tggggagtac	gagcagcgcc	300
tcagcttcca	ggacagaggg	gctaactctgg	ccctgactca	agtacacccc	caagacgagc	360
gcattctctt	gtgccagggc	aagcgccctc	ggctccaggga	gtaccgctgc	cagctccgct	420
ttctacaaagc	tcgggaggag	ccaaacatcc	aggtcaaccc	cctgggcatc	cctgtgaaca	480
tgaaaggagcc	tgaggaggtc	gctacctgtg	tagggaggaa	cggttaccoc	attcctcaag	540
tcattctgga	caagaatggc	cggtctctga	aggaggagaa	gaaccgggtc	cacattcagt	600
cgctccagac	tgtggagtgc	agtggtttgt	acaccttgca	gagtattctg	aaggcacagc	660
tggtttaaaga	agacaagaat	gcccagtttt	actgtgagct	caactaccgg	ctgccagtg	720
ggaaccacat	gaaggagtcc	agggaagtca	ccgtccctgt	tttctaccgc	acagaaaaag	780
tgtggcttga	agtgaggccc	gtgggaatgc	tgaaggaaag	ggaccgctgc	gaaatcagggt	840
ggttgggtga	tggcaaccct	ccaccactgc	tcagcatcag	caagcagAAC	cccagacca	900
gggaggcaga	ggaagagaca	accaacgaca	acgggtctct	ggtgtctggag	cctgcccgga	960
aggaacacag	ttgggcctat	gaatgtcagg	cctggaactt	ggacaccatg	atatcgctgc	1020
tgagtgaacc	acaggaaacta	ctgtgtgaact	atgtgtctga	cgctccagtg	agttcccgct	1080
cccttgagag	acaggaaaggc	agcagcctca	ccctgacctg	tgaggcagag	agtagccagg	1140
acctcgagtt	ccagtggctg	agagaagaga	cagaccaggt	gctggaaagg	gggcctgtgc	1200
ttcagttgca	tgacctgaaa	cgggaggcag	gaggcggtga	tcgctgcgtg	gcgtctgtgc	1260
ccagcatacc	cggtcctgaac	cgacacagc	tggctcaagct	ggccattttt	ggccccctt	1320
ggatggcatt	caaggagagg	aaggtgtggg	tgaaagagaa	tatggtgttg	aatctgtctt	1380
gtgaagcgtc	agggcacccc	cgcccaacca	tctcctggaa	cgtcaacggc	acggcaagtg	1440
aaacagacca	agatccacag	cgagctccta	gcacctgaa	tgtcctcgtg	accccgagc	1500
tccttgagag	aggtgttgaa	tgacagggct	ccaacgacct	gggcaaaac	accagcatcc	1560
gttctctgga	gctgggtcaat	ttaacacccc	tcacaccaga	ctccaacaca	accactggcc	1620
tcagcatctc	cactgccagt	cctcacaacca	gagccaacag	caacctccaca	gagagaaaag	1680
tgccggagcc	ggagagccgg	ggcgtgtgtca	tcgtggctgt	gattgtgtgc	atcctggctc	1740
tgccgggtgt	gggcgctgtc	ctctatttcc	tctataagaa	gggcaagctg	ccgtgcaggc	1800
gctcagggaa	gcaggagatc	acgctgtccc	cgtctcgtaa	gaccgaactt	gtagttgaag	1860
ttaatctcaga	taagctccca	gaagagatgg	gcctcctgca	gggcagcagc	gtgcacaaga	1920
gggtcctcgg	agaccaggga	gagaaatata	tcgatctgag	cgattagccc	cgaatcactt	1980
cagctccctt	ccctgctcgg	accattccca	gctccctgct	cactcttctc	tcagccaaag	2040
cctccaaagg	gactagagag	aagcctcctg	ctccctcac	ctgcacaccc	cctttcagag	2100
ggccactcgg	ttaggacctg	aggacctcac	ttggccctgc	aagccgcttt	tcaggggacca	2160
gtccacacac	atctcctcca	cggttagtga	agctcatccc	aagcaaggag	ccccagttc	2220
ccgagcgggt	aggagagttt	cttcgcagaac	gtgttttttc	tttacacaca	ttatggctgt	2280
aaatacctgg	ctctctccag	cagctgagct	gggtagcctc	tctgagctgg	tttctcgtcc	2340
caaaggctgg	cttccaccat	ccagctgcac	cactgaagtg	aggacacacc	ggagccaggc	2400
gcctgctcat	gttgaagtgc	gctgtttcaca	cccgtccgg	agagacaccc	agcggcatcc	2460
agaagcagct	gcagtgtgtg	tgccaccacc	ctcctgctgc	cctcttcaaa	gtctcctgtg	2520
acatttttttc	tttggtcaga	agccaggaaac	tggtgtcatt	ccttaaaaga	tacgtgcccg	2580
ggccagggtg	ggtggctcac	gcctgttaac	ccagcacttt	gggagggcga	ggcgggcgga	2640
tcacaaagtc	aggacagagc	catcctggct	aaacaggtga	aacctgtctc	ctactaaaaa	2700
tacaaaaaaa	aattagctag	gcgtagtgtg	tgccacctat	agtcacagct	actcggaagg	2760
ctgaagcagg	agaaatggtat	gaatccaggga	ggtggagctt	gcagtgaacc	gagaccgtgc	2820
cactgcactc	cagctcgggc	aacacagcga	gactccgtct	cagggaaaaa	aaaaagaaaag	2880
acgcgtacct	gggtgtagga	agctggggcg	tggttttcag	ttcaggtgaa	ttagcctcaa	2940
tcccctgtgt	cactgtctcc	catagccctc	ttgatggatg	acgtaaaact	gaaaggcagc	3000
ggggagcaga	caaagatgag	gtctacactg	tccttcatgg	ggattaaagc	tatgggtata	3060
ttagaccacaa	actttctaaa	accaagctca	gggccccaac	cctagaaggg	cccaaatgag	3120
agaatggtac	ttaggatagg	aaaacggggc	ctggctagag	cttcgggtgt	gtgtgtctgt	3180
ctgtgtgtat	gcatacatat	gtgtgtatat	atggttttgt	caggtgtgta	aatttgcaaa	3240
ttgtttcctt	tatatatgta	tgtatatata	tatatgaaaa	tatatatata	tatgaaaaat	3300
aaagcttaat	tgtcccagaa	aatcatacat	tgctttttta	ttctacatgg	gtaccacagg	3360
aacctggggg	cctgtgaaac	tacaaccaaa	aggcacacaa	aacctgttcc	agttggcagc	3420
agagatcagg	gggttaacct	gcttctgtag	aaatgggtca	agctctacca	gagcagacag	3480
ctaccctact	tttcagcagc	aaaacgtccc	gtatgacgca	gcacgaaggg	ctgggcaggc	3540
tggttagcagg	agctatgtcc	cttctctatc	tttcgtccca	ctt		3583

<210> 40
 <211> 1251
 <212> DNA
 <213> Homo sapiens

<400> 40
 ggagctgttt accccactc taataggsgt tcaatataaa aagccggcag agagctgtcc 60
 aagtcagacg cgctctgca tctgcgccag gcgaacgggt cctgcgcctc ctgcagctccc 120
 agctctccac caccgcgcgc tgcgcctgca gacgctccgc tcgctgcctt ctctcctggc 180
 aggcgctgcc ttttctcccc gttaaaggcg acttgggctg aaggatcgct ttgagatctg 240
 aggaaccgcg agcgctttga gggacctgaa gctgttttcc ttcgttttcc tttgggttca 300
 gtttgaaccg gaggtttttg atcccttttt ttcagaatgg attatttgc tcatgattttc 360
 tctctgctgt ttgtggcttg ccaaggagct ccagaacacg cagtcctagg cgtcagctc 420
 agcgcggtgg gtgagacgg cggggagaaa cccactccca gtccacctg gcggctccgc 480
 cggtccaacg gctgctcctg ctgcctccct atggataaag agtgtgtcta ctctgcccac 540
 ctggacatca tttgggtcaa cactcccag cactgtgttc cgtatggact tgggaagccct 600
 aggtccaaga gagccttgaa gaatttactt cccacaaaag caacagaccg tgagaataga 660
 tgccaatgtg ctagcctaaa agacaagaag tgctggaatt tttgccaagc agggaaaagaa 720
 ctacgggtcg aagacattat ggagaaagac tgggaataatc ataagaaaag aaaagactgt 780
 tccaagcttg ggaaaaagt tatttatcag cagttagtga gaggaagaaa aatcagaaga 840
 agttcagagg aacacctaag acaaacccag tcggagacca tgagaacacg cgtcaaatca 900
 tcttttcatg atcccaagct gaaggcgaag cctccagag agcgttatgt gaccacaac 960
 cgagcacatt ggtgacagac ttccggggcct gtctgaagcc atagcctcca cggagagccc 1020
 tggggccgac tctgcactct ccacctctgg tcggatcaga gcaggagcat cctctgtctg 1080
 ttctgactgt gcaaaaggacc agcgtcctcg ttcacaaacat tccaagaaaag gtaaggagat 1140
 tcccccaacc atcttccactg gcttccatca gtggttaact ctttgggtctc ttctttcatc 1200
 tggggatgac aatggacctc tcagcagaaa cacacagtca cattcgaatt c 1251

<210> 41
 <211> 2456
 <212> DNA
 <213> Homo sapiens

<400> 41
 gcaagcaccg aacaagctga gacggatgat aatatggata caaaatctat tctagaagaa 60
 ctctcttctca aagatcacac gcaaaagaag aaaatgtcac caaataatta caaagaacgg 120
 ctttttgttt tgaccaaaac aaacctttcc tactatgaat atgacaaaat gaaaaggggc 180
 agcagaaaag gatccattga aattaagaaa atcagatgtg tggagaaaag aaatctcgag 240
 gagcagacgc ctgtagagag acagtaccca ttccagattg tctataaaga tgggcttctc 300
 tatgtctatg catcaaatga agagagccga agtcagtggt tgaaagcatt acaaaaagag 360
 ataaggggta acccccacct gctgggtcaag taccatagtg ggttcttctg ggacgggaa 420
 ttctgtgtgt gccagcagag ctgtaaaagca gcccaggat gtaccctctt ggaagcatat 480
 gctaatctgc atactgcagt caatgaagag aaacacagag ttcccacctt cccagacaga 540
 gtgctgaaga tacctcgggc agtctctgtt ctcaaaatgg atgcaccatc tccaagtacc 600
 actctagccc aatatgacaa cgaatcaaa gaaaactatg gctcccagcc accatcttca 660
 agtaccagtc tagcgaata tgacagcaac tcaaaagaaa tctatggctc ccagccaaac 720
 ttcaacatgc agtatattcc aaggggaagc ttccctgact ggtggcaagt aagaaaactg 780
 aaaaagttaga gcagcagtga agatgttgca agcagtaacc aaaaagaaa aaatgtgaat 840
 cacaccacct caaagatttc atgggaattc cctgagtcga gttcatctga agaagaggaa 900
 aacctggatg attatgactg gtttctgtgt aacatctcca gatcacatc tgaacagtta 960
 ctccagacaaa agggaaaaga agggagcatt atggttagaa attcgagcca agtgggaatg 1020
 tacacagtgt ccttatttag taaggctgtg aatgataaaa aaggaactgt caaacattac 1080
 cactgtgcata caaatgctga gaacaaatca tacctggcag aaaactactg ttttgattcc 1140
 attccaaaag ttattcatta tcatcaacac aattcagcag gcatgctcac acggctccgc 1200
 caccctgtgt caacaaaggc cccgactctg tgcctctggg aaatggaatc 1260
 tgggaactga aaagagaaga gattaccctg ttgaaggagc tgggaagtgg ccagtgtgga 1320
 gtgttccagc tgggcaagtg gaaggggcag tatgatgttg ctgttaagat gatcaaggag 1380
 ggctccatgt cagaagatga attctttcag gaggcccaga ctatgatgaa actcagccat 1440
 cccaagctgg ttaaaattcta tggagtgtgt tcaaaaggaa accccatata catagtgact 1500
 gaatatataa gcaatggctg ctgtctgaat taactgagga gtcacggaaa aggcattgaa 1560
 ccttcccagc tcttagaaat gtgctacgat gtctgtgaa gcatggcctt cttggagagt 1620

caccaattca	tacaccggga	cttggtgct	cgtaactgct	tggtggacag	agatctctgt	1680
gtgaaagat	ctgactttgg	aatgacaagg	tatgttcttg	atgaccagta	gtgcagttca	1740
gtcggaaaca	agtttccagt	caagtgggtca	gtcccagagg	tgtttccatta	cttcaaatatc	1800
agcagcaagt	cagacgtatg	ggcattttggg	atcctgatgt	gggagggtgt	cagcctgggg	1860
aagcagccct	atgactttga	tgacaactcc	caggtgggttc	tgaaggctctc	ccagggccac	1920
agggctttacc	ggcccccact	ggcatcgagc	accatctacc	agatcatgta	cagctgctgg	1980
cacgagcttc	cagaaaagcg	tcccacattt	cagcaactcc	tgtcttccat	tgaaccactt	2040
cgggaaaaag	acaagcattg	aagaagaaat	taggagtgtc	gataagaatg	aatatagatg	2100
ctggccagca	ttttcattca	ttttaaggaa	agtaggaagg	cataagtaaat	tttagctagt	2160
tttttaagt	gttctctgta	ttgtctatta	tttagaaatg	aacaaggcag	gaaacaaaag	2220
attcccttga	aatttagatc	aaattagtaa	ttttgtttta	tgctgctcct	gatataaacac	2280
tttccagcct	atagcagaag	cacattttca	gactgcaata	tagagactgt	gttcatgtgt	2340
aaagactag	cagaactgaa	aaattactta	ttggatattc	attcttttct	ttatatgtgc	2400
attgtcacia	caattaaata	tactaccagg	tacagaaatg	tggaaaaaaa	aaacctg	2456

<210> 42
 <211> 4465
 <212> DNA
 <213> Homo sapiens

<400> 42						
caattgtcat	acgacttgca	gtgagcgctc	ggagcacgtc	caggaaactcc	tcagcagcgc	60
ctccttcagc	tcacagccca	gacgcccctc	gacagcaaag	cctacccccg	cgccgcgcgc	120
tgcccgcgcg	tcggatgtct	gcccgcgcgc	tgetgtgtg	cgcggtctcg	gcgctcagcc	180
atacagcaaa	tccctgtctg	tcccacccat	gtcaaaaacg	aggtgtatgt	atgagtgtgg	240
gatttgacca	gtataagttg	gattgtaccc	ggacaggatt	ctatgggaaa	aactgctcaa	300
caccggaatt	tttgacaaga	ataaatttat	ttctgaaacc	cactccaaac	acagtgtcat	360
acatacttac	ccacttccaa	ggatttttga	acgttgtgaa	taacattccc	ttccttcgaa	420
atgcataatt	gagttatgtc	ttgacatcca	gatcacattt	gattgacagt	ccaccaactt	480
acaatgtctg	ctatggctac	aaaagctggg	aagccttctc	taacctctcc	tattatacta	540
gagcccttcc	tccctgtgct	gatgattgcc	cgactccctt	gggtgtcaaa	ggtaaaaaagc	600
agcttctctg	ttcaaatgag	atttgtgaaa	aattgcttct	aagaagaag	ttcatccctg	660
atccccaggg	ctcaaacatg	atgtttgcac	tctttgccc	gcacttcaag	catcagtttt	720
tcagacagca	tcataagcga	gggccagctt	tcaccaacgg	gctgggccc	ggggtggact	780
taaatcatat	ttacggtgaa	actctggcta	gacagcgtaa	actgcgcctt	ttcaaggatg	840
gaaaaatgat	atatcagata	attgatggag	agatgtatcc	tcccacagtc	aaagatactc	900
aggcagagat	gatctaccct	cctcaagctc	ctgagcatct	acggtttgtc	gtggggcagg	960
aggtcttttg	tctgggtgct	ggctgtatga	tgtatgccac	aatctggctg	cgggaacaca	1020
acagagtatg	cgatgtgctt	aaacaggagc	atcctgaatg	gggtgatgag	cagttgttcc	1080
agacaagcag	gctaatactg	ataggagaga	ctattaagat	tgtgattgaa	gattatgtgc	1140
aacacttgag	tggctatcac	ttcaaacatg	aatttgaccc	agaactactt	ttcaacaaac	1200
aatccagta	ccaaaatcgt	attgtctgct	aatttaaac	cctctatcac	tggcatcccc	1260
ttctgctctg	cacctttcaa	attcatgacc	agaaatacaa	ctatcaacag	tttatctaca	1320
acaactctat	attgtctgga	catggaaata	ccagtttgtt	tgaatcattc	accaggcaaa	1380
ttgtctggcag	ggttgcgtgt	ggttaggaatg	ttccaccgcg	agtagagaaa	gtatcacagg	1440
cttccattga	ccagagcagg	cagatgaaat	accagtcctt	taatgagtag	gcgaacagct	1500
ttatgctgaa	gcctatgagg	tcatttgaag	aacttacagg	agaaaaggaa	atgtctgcag	1560
agttggaagc	actctatggt	gacatcgatg	ctgtggagct	gtatcctgcc	cttctggtgag	1620
aaaagcctcg	gccagatgcc	atctttgggt	aaacctatgt	agaagtttga	gcacattctt	1680
ccttgaaagg	acttatgggt	aatgttatat	gttctcctgc	ctactggaag	ccaagcactt	1740
ttggtggaga	agtggtgttt	caaatcatca	acactgcctc	aattcagctg	ctcatctgca	1800
ataacgtgaa	gggctgtccc	tttacttcat	tcagtggtcc	agatccagct	ctcatataaa	1860
cagtccaccat	caatgcaagt	tcttcccgcg	ccggactaga	tgatataaat	cccacagtac	1920
tactaaaaga	acgttcgact	gaactctaga	agtctaatga	tcatatctat	tttttatat	1980
gaaccatgtc	tattaaattta	attattttaa	aatatttata	ttaaactcct	tatgttactt	2040
aacacttctct	gtacacagaag	tcagttactcc	tgttgcggag	aaaggagtca	tacttgtgaa	2100
gacttttatg	tcactactct	aaagattttg	ctgttgcgtg	taagtttga	aaacagtttt	2160
tattctgttt	tataaaccag	agagaaatga	gttttgacgt	ctttttactt	gaatttcaac	2220
ttatattata	agaaacgaag	taagagatgtt	tgaatactta	aacactatca	caagatggca	2280
aaatgctgaa	agtttttaca	ctgtcgatgt	ttccaatgca	tcttccatga	tgcattagaa	2340
gtaactaatg	tttgaaattt	taaagtactt	ttgtgtattt	ttctgtctac	aaacaaaaac	2400

aggtatcag	gcattattaa	atgaatattt	aaattagaca	ttaccagtaa	tttcatgtct	2460
acttttttaa	atcagcaatg	aaacaataat	ttgaaatttc	taaattcata	gggtagaatc	2520
acctgtaaaa	gcttggttga	tttcttaaag	ttattaaact	tgtacatata	ccaaaaagaa	2580
gctgtcttgg	attttaaact	gtaaaaatcag	atgaaatttt	actacaattg	cttggttaaaa	2640
tattttataa	gtgatgttcc	tttttcacca	agagtataaa	cctttttagt	gtgactgtta	2700
aaacttcctt	ttaaatcaaa	atggccaaatt	tattaaagtg	gtggagccac	tgcagtgtta	2760
gtcaaaaaat	agaatatttt	gttgagatat	tccagaattt	gtttatatgg	ctggttaacat	2820
tctaaaatcta	tatcagcaaa	agggctctacc	tttaaaataa	gcaataacaa	agaagaaaaa	2880
caaaattattg	ttcaaaattta	ggtttaaact	tttgaagcaa	actttttttt	atccttctg	2940
actgcaggcc	tgggtactcag	attttgctat	gaggttaatg	aagtaccaag	ctgtgcttga	3000
ataacgatat	gttttctcag	attttctgtt	gtacagttta	atttagcagt	ccatatcaca	3060
ttgcaaaagt	agcaatgacc	tcataaaata	cctcttcaaa	atgcttaaat	tcatttcaca	3120
cattaattttt	atctcagctc	tgaagccaat	tcagtaggtg	cattggaatc	aagcctggct	3180
acctgcagtc	tgttctcttt	cctttcttct	tttagccatt	ttgtcaagag	acacagctct	3240
ctcatcaact	cgtttctcct	attttgtttt	actagtttta	agatcagagt	tcactttctt	3300
tggactctgc	ctatatcttc	ttacctgaac	ttttgcaagt	tttcaggtaa	acctcagctc	3360
aggactgcta	tttagctcct	cttaaaagaa	ttaaaagaga	aaaaaaaaag	cccttttaaa	3420
aatagtatata	acttattttta	agtgaaaagc	agagaatttt	attttatagt	aatttttagct	3480
atctgttaacc	aagatggatg	caaaagagct	agtgcctcag	agagaactgt	acggggtttg	3540
tgactggaaa	aagttacggt	cccattctaa	ttaatgcctt	ttcttattta	aaaacaaaaa	3600
caaatgatata	ctaagtagtt	ctcagcaata	ataataatga	cgataatact	tcttttccac	3660
atctcattgt	cactgacatt	taatgggtact	gtatattact	taattttatt	aagatttatta	3720
tttatgtctt	attaggacac	tatgggtata	aactgtgttt	aagcctacaa	tcattgtatt	3780
ttttttgtta	tgtcaccaatc	agtatatatt	ctttgggggt	acctctctga	atattatgta	3840
aaacaatccaa	agaaatgatt	gtatcaagat	ttgtgaataa	atttttagaa	atctgatttg	3900
cataattgaga	tatttgaagt	tgaatgtttg	tccttaggat	aggcctatgt	gctagccac	3960
aaagaatatt	gtctcattag	ctgaatgtg	ccataagact	gaccttttaa	aatgttttga	4020
gggatctgtg	gatgcttcgt	taatttgttc	agccacaatt	tatttgagaaa	atattctgtg	4080
tcaagactat	tgggtttttaa	tattttttaa	tcaaacgctg	attacagata	atagtattta	4140
tataaaatca	tgaaaaaaat	ttcttttttg	gaagagggag	aaaatgaaat	aaatatcatt	4200
aaagataact	caggagaaac	ttctttacaa	ttttacgttt	agaatgttta	agggttaagaa	4260
agaaatagtc	aatatgcctg	tataaaacac	tgttctactgt	ttttttttaa	aaaaaaactt	4320
gatttgttat	taacattgtat	ctgctgacaa	aaacctggga	tttgggttgt	gtatgcgaat	4380
gtttcagtcg	ctcagacaaa	tgtgtattta	acttatgtaa	aagataagtc	tggaaataaa	4440
tgtctgttta	tttttgtact	atttta				4465

<210> 43
 <211> 5434
 <212> DNA
 <213> Homo sapiens

caagtgcgct	cgccgcgcgc	cttccccctc	ccgcctcccc	ggccccctcc	ccggaaccgg	60
cggtgcagct	acggtgcggg	acgagtggaa	ccgagactgc	cccgcgagc	cgcgggtatg	120
agcgcgccct	gccaccccg	gtcccaggcc	cggcctttct	gacaagagct	agactctcgg	180
ctcccttgag	atattcagtt	ttgtatgttt	gaatatcctc	tcacctgttt	cagcataaag	240
taccattctt	aatgattatc	ctcaacaaga	cagggtgtgag	agggttgctg	ttgcattgca	300
atcatgggtg	aaaaatacca	gtccccagtg	agagtgtaca	aataccccct	tgaattaaat	360
atggctgcct	atgaaaaggag	gttccctaca	tgtcctttga	ttccgatgtt	ctgtgggcagt	420
gacactgtga	gtgaattcaa	gagcgaagat	ggggctattc	atgtcattga	aaggcgctgc	480
aagctggatg	tagatgcacc	cagactgtctg	aagaagattg	caggagtgtg	ttatgtttat	540
ttgtccaga	aaaactcact	gaattctcgg	gaacgtactt	tgcacattga	ggcttataat	600
gaaaacgttt	ccaatcgggt	catcattaat	gagcattgct	gctacaccgt	tcaccctgaa	660
aatgaagatt	ggacctgttt	tgaacagctc	gcaagtttag	atattaaatc	tttctttgg	720
tttgaagata	cagtggaataa	aattgcacatg	aaacaatata	ccagcaacat	taaaaaagga	780
aagggaatca	tcgaataacta	ccttcgccaa	ttagaagaag	aaggcataac	ctttgtgccc	840
cgttggagct	cgcttcctct	cacgcctctc	tcagagacat	cttcacatc	ctccaagaaa	900
caagcagcgt	ccatggccgt	cgtcatccca	gaagctgccc	tcaaggaggg	gctgagtggt	960
gatgcctcta	gcagcccccag	tgcacctgag	cccgtgggtg	gcacccctga	cgacaaaacta	1020
gatgcgcgac	acatcaagag	atacctgggc	gatttgactc	cgctgcagga	gagctgcctc	1080
attagacttc	gccagtggtc	ccaggagacc	cacaagggca	aaattccaaa	agatgagcat	1140

attcttcgggt	tcctccgtgc	acgggatttt	aatattgaca	aagccagaga	gatcatgtgt	1200
cagctcttga	cgtggagaaa	gcagcatcag	gtagactaca	ttcttgaac	ctggaccct	1260
cctcagggtcc	ttcaggatta	ctacgcggga	ggctggcatc	atcacgacaa	agatgggagg	1320
ccctctctag	tgctcagggt	ggggcagatg	gacaccaaag	gcttgggtgag	agcgctcggg	1380
gagggaagccc	tgcttgagata	cgttctctcc	gtaaatgaag	aacggctaag	gcgatgcgaa	1440
gagaatacaaa	aagtctttgg	tcggcctatc	agctcatgga	cctgcctggg	ggacttgga	1500
gggctgaaca	tcgcgcactt	gtggagacct	gggtgtgaa	cgctgctggc	gatcatcgag	1560
gtgggtggagg	ccaaactccc	tgagacactg	ggccgccttc	tcactctggc	ggcgccagg	1620
gtatttctctg	tgctctggac	gctgggttagt	ccgttcattg	atgacaacac	cagaaggaag	1680
ttcctcattt	atgcaggaaa	tgactaccag	ggctctggag	gcctgctgga	ttacatcgac	1740
aaagagatta	ttccagattt	cctgagtggt	gagtgcatgt	gcgaagtgc	agaggggtgga	1800
ctgggtcccca	aatctctgta	ccggactgca	gaggagctgg	agaacgaaga	cctgaagctc	1860
tggagtgaga	ccatctacca	gtctgcaagc	gtcttcaaa	gagccccaca	tgagattctc	1920
attcagattg	tggatgcctc	gtcagtcac	acttgggatt	tcgacgtgtg	caaaggggac	1980
attgtgtttaa	acatctatca	ctccaaagag	tcgccacaca	cacccaaaaa	ggactccctg	2040
ggagccacca	gcacacctc	ctcgggtggg	aacaatgtgc	agctcataga	caaatgtctg	2100
cagctggggcc	gcgactacag	catgggtggg	tcgcctctga	ctgcacaaag	aggagaaagc	2160
gtgcagggtt	cccatgtgac	caggtggccc	ggcttctaca	tcctgcagtg	gaaattccac	2220
agcatctctg	cgtgcgcgc	cagcagcctt	ccccgggtgg	acgacgtgct	ggcttccctg	2280
cagggtctctt	cgacacaagt	taaagtgatg	tactacaccg	agggtgatcg	ctcggaggat	2340
ttcagagggt	ccatgacgag	cctggagctc	agccacagcg	gcttctcca	gctgagtgcc	2400
gccaccacct	ctccacgcca	gtcccactcc	agctccatgt	ttccaggta	gtgcgcgct	2460
gcctgcacct	agtgtgcaga	ggggacggcc	gccctcctc	ggacagcagc	tgaccccgcc	2520
cacccagcgg	gcacattgta	cagactcctc	tcacctctag	atagcaata	gctctcagat	2580
ggtaaaacgta	cgctgttgat	cccaaaacta	ccttggcagg	tagttttaac	tctgactcta	2640
acttaactca	atagccatag	attttgtata	cgttgtgcac	aaaatccaac	cagagcgcaa	2700
gggtctctctt	gaaagaaaag	tagtttctgt	accaattaaa	ggattgacgt	gctctcagat	2760
attgatgcaa	aaaatttttc	caacgaactc	cgcatgtgcc	attagtgaat	gaattcctgt	2820
gacatctctc	agagatggcc	ctctctcacc	tgggacggaa	gctgccagct	cgcttcccc	2880
aagctgcctc	atggcgccga	cgcgcctca	cggcccccat	gcttccgcgc	agtcacaagt	2940
gtctgtggac	ttaggggccag	cccttgagat	ccttactctc	tgaggatca	gaggttgctc	3000
gcggagatcc	ttgtcccagg	gccagacaca	ccacacacc	ccactgtctg	cagtggggcc	3060
gggggctcag	gaggggctct	cagggaactcc	tggtgactcc	aggaaaatgc	tgccactcgt	3120
aaacattact	ttctcttctc	tccttttcaa	atctttttga	tactttttag	acgagatttt	3180
ttctgtatgt	gaacttgggt	gggggggttc	ttcccgtttc	cttccgtgcg	tcgccctct	3240
cacctgcagt	cagctcccag	cccagtgtag	gccatctcct	ctgtgcctc	tggaggctca	3300
ttgtctcaga	gccagacag	ttccagccac	taggaggccg	tcttggaaac	agcaagtgc	3360
atttgcacct	tgacactgtc	catggggttt	tattagtagc	taagcagcag	ctctcgcatc	3420
cacttcagggt	tggcgtgtgg	catgtaggag	tcctgcttct	ttgtacatgg	gaattgtgga	3480
ctcatgcgtg	tgtgtgtgtg	catgtgtcgt	gtgtgtgcac	gtgtgcacga	cggtgggggt	3540
gctggggggga	cggggtgagt	ggaaacttag	tttgagtaac	gaaggaaatc	tacagaaagc	3600
aaatcagaat	atgggatttg	tttgcccttt	acattttgtt	taattcctga	ttttaaaagg	3660
tgtctatct	ggtacaggcc	cttatttttt	cagcttttta	tgggaaaagc	aggttatttg	3720
agaatctgtc	cagaagtgtc	ataggggatg	gcctccacga	taaggacatg	caaacctgtg	3780
ttctgtgtgc	agcagaggcc	gtgtttttta	tgccaaaacc	cacgcgggtg	tcaactgtgt	3840
cgctgttagg	catggagatc	ctggttgtgc	cgctctcagc	ccgctctgaa	ggcactgtgt	3900
gggtgctcgc	tgactggaga	gctgtgtgga	ggccatgtgt	gccccgtgca	gggatcagga	3960
gggcggggga	gggacagcag	agccctcttg	cccggtcggg	tcagccctag	tggtgcctg	4020
cacactgtag	acgtcccagg	gcctgtgcgt	tgatcacctg	cccttggacc	acatttgtgt	4080
ttgtctctag	agatcgagct	cctcagtggt	acctgaagcc	tttgcttccg	gaaagcgcg	4140
tagggttcgt	aggtagggct	agtaggtagg	gttagtaggt	agggctagta	ggtagggcta	4200
gtaggtaggg	ttagtaggta	gggttcgtag	gtagggctgg	taggtagggt	tagtaggtag	4260
ggctagtagg	tagggttcgt	aggtagggct	agtaggtagg	gttagtaggt	agggctagta	4320
ggtagggcta	gtaggtaggg	ttagtaggta	gggttcgtag	gttagggctg	taggtagggt	4380
tagtaggttag	ggctagtagg	tagggttcgt	aggtagggct	agtaggtagg	gttagtaggt	4440
agggctagta	ggtagggcta	gtaggtaggg	ttagtaggta	gggttcgtag	gtagggctgg	4500
taggtagggt	gttaggtagg	ggctagtagg	taggtagggt	aggtagggct	agtaggtagg	4560
gttagtaggt	agggctagta	ggtagggcta	gtaggtaggg	ttagtaggta	gggttcgtag	4620
gtagggctgg	taggtagggt	tagtaggttag	ggctagtagg	tagggctagt	aggtagggct	4680
agtaggtagg	gctagtaggt	agggctagta	ggtagggcta	gtaggtaggg	ctagtaggta	4740
gggttcgtag	gtaggggttcg	taggtagggt	tcgtaggttag	gggttagtagc	gcgtctgtgc	4800

tgttccacc	tggtgtcttc	tgttccaaa	tcacaagggc	ctgaagggtg	tcctgtctt	4860
ctctttctct	ttctctgtgt	ctcagatggc	gattttgctg	acagctgcca	agaaaatgct	4920
tcactcaaca	gtctctcatgt	gcccagagat	gtttatagaa	ctgtttgaa	tgacgccatc	4980
ccctgcccc	tcccaggctg	aagatctgtt	ctttttaagt	tgattcggga	gtggcatctc	5040
tttatacca	aagactgtag	tgcatcttga	agagctcaaa	gcacatgacc	gcacaaatgc	5100
ttacagggtt	tcctcccgag	taatccaatc	tcactccctt	tgtaagggaa	ttctggggca	5160
gctatggttt	gagtatgcag	tttgcacgt	gtttctacct	ttagtacctt	gccactcttt	5220
taaaacgtct	ctgtcatttc	ccattttctt	gtactaatga	ttctttgatt	ctccctctat	5280
tatgtcttaa	ttcactttcc	ttcctaaatt	tgttatttgc	atatcaaat	ctgtaaatgt	5340
ttgttaaca	tattactcca	cttggttaata	caatactgat	agtccttaaa	agattttttt	5400
attgttatca	ataataaatt	tgaactattt	aaag			5434

<210> 44
 <211> 2986
 <212> DNA
 <213> Homo sapiens

<400> 44						
gcgccccagt	cgacgtgag	ctcctctgct	actcagagtt	gcaacctcag	cctcgctatg	60
gctcccagca	gcccccgcc	cgcgtgcccc	gcactcctgg	tcctgctcgg	ggctctgttc	120
ccaggacctg	gcaatgcccc	gacatctgtg	tccccctcaa	aagtcacctc	gccccgggga	180
ggctccgtgc	tggtgacatg	cagcacctcc	tgtgaccagc	ccaagtgtgt	gggcatagag	240
accccgcttg	ctaaaaagga	gttgctcctg	cctgggaaca	accgggaagg	tgatgaactg	300
agcaatgtgc	aagaagatag	ccaaccaatg	tgtattcaa	actgccctga	tgggcagtca	360
acagctaaaa	ccttctctac	cgtgtactgg	actccagaac	gggtggaaat	ggcacccttc	420
ccctcttggc	agccagtggg	caagaacctt	accctacgct	gccagggtgg	gggtggggca	480
ccccgggcca	accctaccgt	ggtgctctgc	cgtggggaga	aggagctgaa	acgggagcca	540
gctgtggggg	agcccgttga	ggtcacgacc	acggtgctgg	tgaggagaga	tcaccatgga	600
gccaatttct	cgtgcgcgac	tgaactggac	ctgcggcccc	aagggctgga	gctgtttgag	660
aacacctcgg	ccccctacca	gctccagacc	tttgtcctgc	cagcgactcc	cccacaaact	720
gtcagcccc	gggtctctaga	ggtggacacg	caggggaccg	tggtctgttc	cctggacggg	780
ctgttccccg	tctcgagggc	ccaggtccac	ctggcactgg	gggaccagag	gttgaacccc	840
acagtcacct	atggcaacga	ctccttctcg	gccaaaggct	cagtcagttg	gaccgcagag	900
gacgagggca	cccagcggtc	gacgtgtgtca	gtaatactgg	ggaaccagag	ccaggagaca	960
ctgcagacag	tgaccatcta	cagctttccg	gcgcaccaac	tgattctgac	gaagccagag	1020
gtctcagaag	ggaccgaggt	gacagtgaag	tgtgaggccc	accctagagc	caaggtgacg	1080
ctgaatgggg	ttccagcccc	gccactgggc	ccgagggccc	agctcctgct	gaaggccacc	1140
ccagaggaca	acgggcgcag	cttctcctgc	tctgcaaccc	tggagggtgc	cggccagctt	1200
atacacaaga	accagaccgc	ggagctctgt	gtcctgtatg	gcccccgact	ggacgagagg	1260
gattgtccgg	gaaactggac	gtggccagaa	aattcccagc	agactccaat	gtgccaggct	1320
tgggggaaac	catttgccga	gctcaagtgt	ctaaaaggatg	gcaactttccc	actgcccata	1380
ggggaatcag	tgaactgtcac	tcgagatctt	gagggccacct	acctctgtcg	ggccaggagc	1440
atcaacgggg	aggctcaccg	cgaggtgacc	gtgaatgtgc	tctccccccg	gtatgagatt	1500
gctcatcatca	ctgtgtgtagc	agcccgagtc	ataatgggca	ctgcaggcct	cagcacgtac	1560
ctctataaac	gcagcgcgaa	gatcaagaaa	tacagactac	aacagggccca	aaaagggacc	1620
cccatgaaac	cgaacacaca	agccacgcct	ccctgaacct	atcccgggac	aggccctctt	1680
cctcgccctt	cccatatttg	tggcagtggt	gccacactga	acagagtggg	agacatatgc	1740
catgcagcta	cacctaccgg	ccctgggacg	ccggaggaca	gggcattgtc	ctcagtcaga	1800
tacaacagca	tttggggcca	tggtacctgc	acacctaaaa	cactaggcca	cgcattctgat	1860
ctgtagtcc	atgactaagc	caagagggaag	gagcaagact	caagacatga	ttgatgggatg	1920
ttaaagtcta	gctctgatga	agggggaagt	gtggggggaga	catagcccca	ccatgaggac	1980
atacaactgg	gaaatactga	aacttctctg	ctattgggta	tgctgaggcc	cacagactta	2040
cagaagaagt	ggccctccat	agacatgtgt	agcatcaaaa	cacaaaggcc	cacacttctc	2100
gacggatgcc	agcttgggca	ctgctgtcta	ctgaccccaa	cccttgatga	tatgtattta	2160
ttcatttgtt	atttttaccg	ctattttattg	agtgtctttt	atgtaggcta	aatgaacata	2220
ggctcttgcc	ctcacggagc	tcccagtcga	tgtcacattc	aaggtcacca	ggtacagttg	2280
tacaggtgt	acactgcagg	agagtgccctg	gcaaaaagat	caaatggggc	tgggactctc	2340
cattggccaa	cctgcctttc	ccagaaggga	gtgatttttc	tatcggcaca	aaagcactat	2400
atggactggt	aatgggttcac	aggttccagag	attaccagat	gaggccttat	tcctcccttc	2460
cccccaaac	tgacaccttt	gttagccacc	tccccacca	catacatttc	tcaggagttt	2520
cacaatgaca	ctcagcggtc	atgtctggac	atgagtggcc	agggaaatag	cccaagctat	2580

gccttgtcct	cttgtcctgt	ttgcatttca	ctgggagctt	gcactattgc	agctccagtt	2640
tcctgcagtg	atcagggctg	tgcaagcagt	ggggaagggg	gccaaaggtat	tggaggactc	2700
cctccagct	ttggaaggtg	catccgcgtg	tgtgtgtgtg	tgtatgtgta	gacaagctct	2760
cgctctgtga	cccagggctg	agtgacagtg	tgcaatcatg	gttcactgca	gtcttgacct	2820
tttgggtca	agtgatcttc	ccacctcagc	ctcctgagta	gctgggacca	taggtgcaca	2880
acaccacacc	tggcaaatat	gatttttttt	ttttttttca	gagacggggg	ctcgcaacat	2940
tgccagact	tcccttgtgt	tagttaataa	agcttttctc	actgcc		2986

<210> 45
 <211> 4138
 <212> DNA
 <213> Homo sapiens

<400> 45						
cttctgtgct	gttcccttct	gcctctaact	tgtaacaag	acgtactagg	acgatgctaa	60
tggaaagtca	caaacgcgtg	ggtttttgaa	aggatccttg	ggacctcatg	cacattttgtg	120
gaaactggat	ggagagattt	ggggaagcat	ggactcttta	gccagcttag	ttctctgttg	180
agtcagcttg	ctcctttctg	gaactgtgga	agggtgccatg	gactttgatct	tgtatcaattc	240
ccctacctct	gtatctgtag	ctgaaacatc	tctcacctgc	attgcctctg	ggtggcgccc	300
ccatgagccc	atcccatag	gaagggaact	tgaagcctta	atgaaccagc	accaggatcc	360
gctggaagt	actcaagatg	tgaccagaga	atgggctaaa	aaagtgtgtt	ggaagagaga	420
aaaggctagt	aagatcaatg	gtgcttattt	ctgtgaaggg	cgagtctgag	gagaggcaat	480
caggatacga	accatgaaga	tgcgtcaaca	agcttccttc	ctaccagcta	ctttaactat	540
gactgtggac	aagggagata	acgtgaacat	atctttcaaa	aaggtattga	ttaaagaaga	600
agatgcagtg	atttacaata	atgggtcctt	catccattca	gtgccccggc	atgaagtacc	660
tgtatattct	gaagtacacc	tgcctcatgc	tcagccccag	gatgtcggag	tgtactcggc	720
caggatatata	ggaggaaacc	tcttcaacct	ggccttcacc	aggctgatag	tccggagatg	780
tgaagcccag	aagtggggac	ctgaatgcaa	ccatctctgt	actgcttgta	tgaacaatgg	840
tgtctgccat	gaagatactg	gagaatgcat	ttgccctcct	gggtttatgg	gaaggacgtg	900
tgagaaggct	tgtgaactgc	acacgttttg	cagaacttgt	aaagaagggt	gcagtggaca	960
agagggatgc	aagtcttatg	tgttctgtct	ccctgacccc	tatgggtgtt	cctgtgccac	1020
aggctggaag	ggtctgcagt	gcaatgaagc	atgccaccct	gggtttttacg	ggccagattg	1080
taagcttagg	tgcagctgca	acaatgggga	gatgtgtgat	cgcttccaaag	gatgtctctg	1140
ctctccagga	tggcaggggc	tcacgtgtga	gagagaaggc	ataccgagga	tgacccccaa	1200
gatagtggat	tggccagatc	ataatagaat	aaacagtggg	aaatttgaatc	ccatttgcac	1260
agcttctggc	tggccgctac	ctactaagta	agaaatgacc	ctgggtgaagc	cggatgggac	1320
agtgctccat	ccaaaagact	ttaaccatac	ggatcatttc	tcagttagcca	tattcaccat	1380
ccaccggatc	ctccccctgc	actcaggagt	ttgggtctgc	agtggtgaaca	cagtggctgg	1440
gatgggtgaa	aagcccttca	acatttctgt	taaagttcct	ccaaagcccc	tgaatgcccc	1500
aaacgtgat	gacactggac	ataactttgc	tgtcatcaac	atcagctctc	agccttactt	1560
tggggatgga	ccaatcaaat	ccaagaagct	tctatacaaa	cccgttaatc	actatgaggc	1620
ttggcaacat	attcaagtga	caaagtgat	tgttacactc	aactatttgg	aacctcggac	1680
agaatatgaa	ctctgtgtgc	aactgggtccg	tcgtggagag	gggtggggag	ggcactctgg	1740
acctgtgaga	cgcttcacaa	cagcttctat	cggactccct	cctccaagag	gtctaaatct	1800
ctcgtcctaa	atgcagacca	ctctaaattt	gacctggcaa	ccaattattc	caagctcgga	1860
agatgacttt	tatgttgaag	tggagagaag	gtctgtgcaa	aaaagtgatc	agcagaatat	1920
taaagttcca	ggcaacttga	cttcgggtgt	acttaacaac	ttacatccca	gggagcagta	1980
ctgtgtccga	gctagagtca	acaccagggc	ccagggggaa	tggagtgaa	atctcaactgc	2040
ttggaccctt	agtgacattc	ttcctcctca	accagaaaaa	atcaagattt	ccaacattac	2100
acactcctcg	gctgtgattt	cttggaacaat	attggatggc	tattctattt	cttctattac	2160
tatccgttac	aaggttcaag	gcaagaatga	agaccagcac	gttgatgtga	agataaagaa	2220
tgccaccatc	attcagtatc	agctcaaggg	cctagagcct	gaaacagcat	accagggtga	2280
cattttttga	gagaaacaaca	taggggtcaag	caaccagacc	ttttctcatg	acttggtgac	2340
cctcccagaa	tctcaagcac	cagcggaact	cggagggggg	aagatctgcg	tatatgccat	2400
ccttggctct	gctggaatga	cctgcctgac	tgtgctgttg	gcctttctga	tcataattgca	2460
attgaagagg	gcaaatgtgc	aaaggagaat	ggccccagcc	ttccaaaacg	tgagggaaga	2520
accagctgtg	cagttcaact	cagggaactc	ggccctaaac	aggaaggtca	aaaacaaccc	2580
agatcctaca	atttatccag	tgcttgaactg	gaatgacatc	aaatttcaag	atgtgatttg	2640
ggaggggcaat	tttggccaag	ttcttaaggc	gcgcataca	aaggatgggt	tacggatgga	2700
tgtcgccatg	aaaagaatga	aagaatatgc	ctccaaagat	gatcacaggg	actttgcagg	2760
agaactggaa	gttctttgta	aacttggaca	ccatccaaac	atcatcaatc	tcttaggagc	2820

atgtgaacat	cgaggetact	tgtacctggc	cattgagtac	gcgccccatg	gaaaccttct	2880
ggacttcctt	cgcaagagcc	gtgtgctgga	gacggaccca	gcattttgcca	ttgccaatag	2940
caccgcgtcc	acactgtcct	cccagcagct	ccttcacttc	gctgccgacg	tgccccgggg	3000
catggactac	ttgagccaaa	aacagtttat	ccacagggat	ctggctgccca	gaaacatttt	3060
agttgggtgaa	aactatgtgg	caaaaatagc	agatttttga	ttgtcccag	gtcaagaggt	3120
gtacgtgaaa	aagacaatgg	gaaggctccc	agtgcgctgg	atggccatcg	agtcactgaa	3180
ttacagtgtg	tacacaacca	acagtgtagt	atggctccat	gggtgtgtac	tatgggagat	3240
tgttagctta	ggaggcacac	cctactcggg	gatgacttgt	gcagaactct	acgagaagct	3300
gcccccagggc	tacagactgg	agaagccctc	gaactgtgat	gatgaggtgt	atgatctaata	3360
gagacaatgc	tggcggggaga	agccttatga	gaggccatca	tttgcccaga	tattggtgtc	3420
cttaaacaga	atgttagagg	agcgaagac	ctacgtgaat	accacgcttt	atgagaagtt	3480
tacttatgca	ggaattgact	gttctgctga	agaagcggcc	taggacagaa	catctgtata	3540
ccctctgttt	ccctttcact	ggcatgggag	acccttgaca	actgctgaga	aaacatgcct	3600
atgccaaaagg	atgtgatata	taagtgtaca	tatgtgctgg	aattctaaca	agtcataaggt	3660
taatattttaa	gacactgaaa	aatctaagtg	atataaatca	gattcttctc	tctcatttta	3720
tccctcacct	gtagcatgcc	agtcctgttt	catttagtca	tgtgaccact	gtctctgtg	3780
tttccacagc	ctgcaagttc	agtcacagat	gctaaccatc	aaaaatagac	ttaactctca	3840
gttcttacaag	gcctaagaat	ctttagagaa	gtatacataa	gtttaggata	aaataatggg	3900
attttctttt	ctttctctcg	gttaatttga	cttgtatat	ttaagaaacc	acagaaagcc	3960
tgggtgacat	ttggggagaca	tgtgacattt	atatattgaa	ttaatatccc	tacatgtatt	4020
gcacattgta	aaaagtttta	gttttgatga	gttgtgagtt	taccttgtat	actgtaggca	4080
cactttgcac	tgatataatca	tgagtgaata	aatgtcttgc	ctactcaaaa	aaaaaaaa	4138

<210> 46

<211> 1204

<212> DNA

<213> Homo sapiens

<400> 46

cggaacgagg	gcaacctgca	cagccatgcc	cgggcaagaa	ctcaggacgg	tgaatggctc	60
tcagatgtct	ctgggtgttc	tggtgtcttc	gtggctgccg	catggggcgg	ccctgtctct	120
ggccgagggc	agccgcgcaa	gtttccgggg	accctcagag	ttgcaactcg	aagactccag	180
attccgagag	ttgcggaaac	gctacgagga	cctgtctaac	aggtctgggg	ccaaccagag	240
ctgggaaagt	tccaacacgc	acctgtctcc	ggccctcgca	gtccggatac	tcacgccaga	300
atgtgcggct	ggatccggcg	gccacctgca	cctgcgtatc	tctcggggcg	cccttcccca	360
ggggctcccc	gaggcctccc	gccttaaccg	ggctctgttc	cggctgtccc	gcacggcgct	420
aaggctcgtg	gacgtgacac	gaccgctcgc	gcgtcagctc	agccttgcaa	gaccccaagc	480
gccgcgcgtg	caacctgcac	tgtcgcgcgc	gccgtcgca	tcggaccaac	tgctggcaga	540
atcttctgtc	gcacggcccc	agctggagtt	gcacttgccg	ccgcaagccg	ccagggggcg	600
ccgcagagcg	cgtgcgcgca	acggggagca	ctgtccgctc	ggggccgggc	gttgtctcgc	660
tctgcacacg	gtccgcgcgt	cgttggaaga	cctgggctgg	gccgattggg	tgctgtcgc	720
acgggaggtg	caagtgaaca	tgtgcatcgg	cgcgtgcccg	agccagttcc	gggcggcaaa	780
catgcacgcg	cagatcaaga	cgaagcctga	ccgcctgaag	cccgaacagg	agccagcgcc	840
ctgctgcgtg	ccgcgcagct	acaatcccat	gggtgctcatt	caaaagaccg	acaccggggt	900
gtcgctccag	acctatgatg	acttgttagc	caaagactgc	cactgcatac	gagcagtcct	960
ggctctccca	ctgtgcacct	gcgcggggga	ggcgacctca	gttgtctctgc	ccctgtgaaat	1020
gggctcaagg	ttcctgagac	acccgattcc	tgcccaaaaca	gctgtattta	tataagctctg	1080
ttattttatta	ttaatattatt	gggggtgacct	tcttgggggac	tcggggggctg	gtctgatgga	1140
actgtgtatt	tattttaaaac	tctggtgata	aaaataaagc	tgtctgaact	gttaaaaaaa	1200
aaaa						1204

<210> 47

<211> 3161

<212> DNA

<213> Homo sapiens

<400> 47

aagctgcagt	tagccaagat	cgcattcattg	cactccagcc	tagggggacaa	gagcgcgaga	60
cttcatctca	aagatttttta	aataatagct	aaaggtatgc	tctctagggtc	atccttagtt	120
tattagtagc	gtactctaaa	attatttttt	taatagtcaa	ttttgggaga	taattatttc	180
tttctctata	ttttccaatt	agttggtgtc	taaaaaataa	tgttttgtct	aatttttagat	240

cagggtataca	ttcacaaaag	cataaatcat	agtctcacag	gaaattcacc	aattttccat	300
atgtcgtgag	ataaactgtcc	tttctacaac	ctcataacaa	tgaatttata	taattacccta	360
gattttctta	gtgtgaatct	acccattagt	tttattttct	tggtagtatt	ttttttccct	420
cctctctgtt	actattggcc	ttaaaataca	caggaggacg	gttacagtg	cctaatagct	480
gttacatgtg	tggtgttcga	cgtacttgaa	tcaagtgtac	atttatagta	ccaataaccg	540
cctttacagc	ttttacagta	acaattctct	cacaaaactg	tagagcatta	ggcatctgag	600
agccatagag	ggccaaactt	gttcacagat	gaacatgctt	tttttcccca	acatatacac	660
tactgatttt	ttttaaagtg	atgactttca	agtgaattaa	tgtattgggt	aggagaacct	720
cttgctaagt	ccttattacc	tcttggtaaa	gcctcagaag	gccgtgctga	aagccagagg	780
ggaaaaaaag	agtaatgcac	agggatctct	tttgccagtg	tgactgtatt	ttgagtacct	840
tgtgtgacag	ggatattatta	cagcatcttg	tgggaaaaac	tattaggcct	ttgcattgta	900
aagctgtata	atttgtgtgg	ttgtgagtgg	tctgacttaa	atgtgtatta	taaaaatttag	960
acatcaaaat	ttcctactaa	ctaactttat	tagatgcata	cttgggaagca	cagtcataac	1020
acactgggag	gcaatgcaat	gtggttacct	ggctcctagg	ttgaactgtc	ttatttcaaa	1080
agattttctga	attaattttt	ccttagaatt	tctccttcat	tccaaagtac	aaacatactt	1140
tgaagaatga	aacagattgt	tcccatgaat	gtatgctcat	actcgactag	aaacgatcta	1200
tgttaaatga	ctgtgtatat	gaattatttc	aagtactacc	ccaaaatact	ttcttattgc	1260
tctgaaagaa	gaaaagcaat	gtaaaatcat	atgattattg	cacaaacac	cagaattctc	1320
caacaatttt	aagtaactct	atcctctctt	tggagaaaaa	tgtactctaa	tagtttttcc	1380
ttatgaatgt	tattactact	gggtataaat	aaatttctat	aaatttctta	cttaaagtct	1440
taaraactgg	gttcttccct	tgatgttatt	catgttcaga	aaggggaaac	acactttaac	1500
tttttaggga	caatttctag	aatctatagt	agtatcagga	tatatatttg	tttaaaatat	1560
atttttggtta	ttttgaatac	agacattggc	tccaaatttt	catctttgca	caatagtatg	1620
acttttccat	agaactcttc	aaactttggg	aaactttgca	atatgagcat	catatgtgtt	1680
aaggctgtat	caatttaagt	tatgagatc	attgttttct	cccatgccca	aacagggtgaa	1740
caaacgtagt	tgttttttac	tgatactaaa	tggtgggtac	ctgtgatttt	atagtatgca	1800
catgtcagaa	aaaggcaaga	caaatggcct	cttgacttga	atacttcggc	aaacttatgt	1860
gggtcttcat	tttctgacag	acaggatttg	actcaatatt	tgtagagctt	gcgtagggaat	1920
gggattacat	gggtagttag	gcactggtag	gaaatgggtt	ttagtatttg	actcagggaat	1980
tcatctcagg	atgaactctt	tatgtctttt	tattgttaagg	catatctgga	atttacttta	2040
taaagggtgg	gtttaggaaa	gctttgtcct	aaaaattggg	ccccggggat	gggaacttca	2100
ttttcagttg	ccaagggtta	gaaaaataat	atgtgtgttg	ttatgtttat	gttaacatat	2160
tattatgtac	tatctatgaa	tgtattttaa	tatttttcat	attctgtgac	aagcatttat	2220
aatttgcaac	aagtggaagt	catttagccc	agtgggaaag	tcttggaaat	caggttaccc	2280
ttgaaggata	tgctggcgag	catctctttg	atctgtgctt	aaactgtaat	ttatagacca	2340
gctaaatccc	taacttggat	ctggaaatga	ttagttatga	cctgtaccac	ttcccagaat	2400
ttcagggggc	tctgtgggtt	ggcttagtga	ttgaaaacac	aagaacagag	agatccagct	2460
gaaaaaagag	gatcctcaat	atcctaacta	actggctctc	aactcaagca	gagtttcttc	2520
actctggcac	tgtgatcatg	aaacttagta	gaggggattg	tgtgtatttt	atacaaattt	2580
aatacaaatg	cttcatattg	taaaattctt	aaagagcaaa	actgcatttt	atcttctgat	2640
ccacattcca	atcatattag	aactaagata	tttatctatg	aagatataaa	tggtgcagag	2700
agactttcat	ctgtggattg	cgttgtttct	ctagggttcc	tcagccactg	atgctctgcc	2760
acaagccatg	tgatattgtg	aataaaaaag	gattcttctc	atagccctaa	tgaagtctcc	2820
tctggggaga	gttctgggtac	gtccatcaca	atgccagatg	gtgtttatgt	gctatttgtg	2880
taagtgaagt	gtaagatgct	atgaagtga	tgtgtttgtt	ttcatcttat	ggaaaactct	2940
gatgcatgtg	cttttgtagt	gaataaattt	tggtgcaata	tgatgtcatt	caacttctgc	3000
ttgaattgaa	ttttggttgt	atttatatgt	attatacctg	tcacgcttct	agttgcttca	3060
accattttat	aaoccatttt	gtacatattt	tacttgaaaa	tatttttaaat	ggaaatttaa	3120
ataaacattt	gatagtttat	ataaaaaaaa	aaaaaaaaaa	a		3161

<210> 48
 <211> 5722
 <212> DNA
 <213> Homo sapiens

ggagcgcacag	gcattccccg	cgccccctcca	gcccctcgccg	ccctcgccac	cgctccccgc	60
cgccgcgctc	cggtacacac	aggatccctg	ctgggcacca	acagctccac	catggggctg	120
gcctggggag	taggcgtcct	gttctctgat	catgtgtgtg	gcaccaacgc	cattccagag	180
tctggccgag	acaacagcgt	gtttgacatc	tttgaactca	ccggggccgc	ccgcaagggg	240
tctgggcgcc	gactgggtgaa	gggccccgac	cctccagacc	cagctttccg	catcgaggat	300

gccaacctga	tccccctgt	gectgatgac	aagttccaag	acctgggtgga	tgctgtgagg	360
gcagaaaagg	gtttctctct	tctggcatcc	ctgaggcaga	tgaagaagac	ccggggcacg	420
ctgtgggcc	tgagcggaa	agaccaactct	ggccagggtct	tcagcgtggt	gtccaatggc	480
aaggcgggca	cctctggacct	cagcctgacc	gtccaaggaa	agcagcagct	gggtgtctgtg	540
gaagaagctc	ctctggcaac	cggccagtg	aagagcatca	cctgtttgt	gcaggaagac	600
agggcccagc	tgtacatcga	ctgtgaaaag	atggagaatg	ctgagttgga	cgtcccacac	660
caaagcgtct	tcaccagaga	cctggccagc	atcgccagac	tccgcactgc	aaaggggggg	720
gtcaatgaca	atttccagg	gggtctgcag	aatgtgaggt	ttgtcttgg	aaccacacca	780
gaagacatcc	tcaggaaaca	aggctgctcc	agctctacca	gtgtcctcct	cacccttgac	840
aacaacgtgg	tgaatgggtc	cagccctgcc	atccgacta	actacattgg	ccacaagaca	900
aaggacttgc	aagccatctg	cggcatctcc	tgtgatgagc	tgctccagcat	ggctctggaa	960
ctcagggggc	tgcgcaccat	tgtgaccacg	ctgcaggaca	gcctccgcaa	agtgactgaa	1020
gagaaacaa	agttggccaa	tgagctgagg	cggcctcccc	tatgctatca	caacggagtt	1080
cagtacagaa	ataacgagga	atggactgtt	gatagctgca	ctgagtgatc	ctgtcagaac	1140
tcagtaccac	cttgcaaaaa	gggtgtcctg	cccactatgc	cctgctccaa	tgccacagtt	1200
cctgatggag	aatgtgtctc	tcgtctgtgg	cccagcgact	ctggcgagca	tggtctgtct	1260
ccatggtccg	agtggacctc	ctgttctacg	agctgtggca	atggaattca	gcagcgcggc	1320
cgctcctcgt	atagcctcaa	caaccgatgt	gagggtctct	cggtccagac	acgggactgc	1380
cacactcagg	atgtgtgaca	aagatttaaa	caggatgggtg	gctggagcca	ctgtgtcccc	1440
tggtcatctt	gttctgtgac	atgtggtgat	gggtgtgatca	caaggatccg	gctctgcaac	1500
ttccccagcc	cccagatgaa	tgggaaaccc	tgtgaaggcg	aagcggggga	gaccaaagcc	1560
tgcagaagaag	acgcctggcc	catcaatgga	ggctggggtc	cttggtcac	atgggacac	1620
tgttctgtca	cctgtggagg	aggggtacag	aaacgtatgc	gtctctgcaa	caacccccga	1680
ccccagtttg	gaggcaagga	ctgcgttggt	gatgtaacag	aaaaccagat	ctccaacaag	1740
caggactgtg	caattgatgg	atgctgtgct	aatccctgct	ttgcccggct	gaagtgtact	1800
agctaccctg	atggcagctg	gaaatgtggt	gcttgtcccc	ctggttacag	tggaatggc	1860
atccagtga	cagatgttga	tgagtgcaca	gaagtgcctg	atgctgtctt	caaccacaat	1920
ggagagcacc	gggtgtgagaa	cacggacccc	ggctacaact	gctgcctctg	ccccccacgc	1980
ttaccggctg	cacagccctt	cggccagggt	gtcgaaacatg	ccacggccaa	caaacagggtg	2040
tgcagaagccc	tgaacccttg	cacggatggg	accacagact	gcaacaagaa	cgccaagtgc	2100
aactacctgg	gccactatag	cgaccccatg	taccgtctcg	agtgcaagcc	tggtctacgt	2160
ggcaatggca	tcacttgccg	ggaggacaca	gacctggatg	gctggcccaa	tgagaacctg	2220
gtgtgcgtgg	ccaatgcgac	ttaccactgc	aaaaaggata	attgccccaa	ctctcccaac	2280
tcagggcagg	aagactatga	caaggatgga	attggtgatg	cctgtgatga	tgacgatgac	2340
aatgataaaa	ttccagatga	cagggaacaac	gttccattcc	attacaaccc	agctcagtat	2400
gactatgaca	gagatgatgt	gggagaccgc	tgtgacaact	gtccctacaa	ccacaaccca	2460
gatcaggcag	acacagacaa	caatggggaa	ggagacgctt	gtgtctgcaga	catgtatgga	2520
gacggtatcc	tcaatgaacg	ggacaactgc	cagtacgtct	acaatgtgga	ccagagagac	2580
actgatattg	atgggggttg	agatcagttg	gacaattgcc	ccttggaaca	caatccggat	2640
cagctggact	ctgactcaga	ccgcatttga	gatacctgtg	acaacaatca	ggatattgat	2700
gaagatggcc	accagaacaa	tctggacaac	tgtccctatg	tgcccaatgc	caaccaggct	2760
gaccatgaca	aagatggcaa	gggagatgcc	tgtgaccacg	atgatgacaa	cgatggcatt	2820
cctgatgaca	aggacaactg	cacagctcgt	cccaatccc	accagaagga	ctctgacggc	2880
gatgtgtcag	gtgatgcctg	caaagatgat	tttgaccatg	acagttgtcc	agacatcgat	2940
gacatctctg	ctgagaatgt	tgcactcagt	gagaccgatt	tcgcccgatt	ccagatgatt	3000
cctctggacc	ccaaagggac	atccccaaat	gaccctaaat	gggtgtgacg	ccatgagggt	3060
aaagaactcg	tcagactgtg	caactgtgat	cctggactcg	ctgtaggtta	tgtatgagtt	3120
aatgctgtgt	acttccagtgg	cacctctctc	atcaacaccg	aaaggggacg	tgactatgct	3180
ggattttgtt	ttggctacca	gtccagcagc	cgctttttatg	ttgtgatgtg	gaagcaagtc	3240
accagtcctt	actgggacac	caacccccacg	agggctcagg	gatactcggtg	cctttctctg	3300
aaagtgttaa	actccaccac	agggcctggc	gagcacctgc	ggaacgccct	gtggcacaca	3360
ggaaacaccc	ctggccagggt	gcccaccctg	tgccatgacc	ctcgtcacat	aggctggaaa	3420
gattttaccg	cctacagatg	gcgtctcagc	cacaggccaa	agacggggtt	cattagagtg	3480
gtgatgtatg	agggaaagaa	aatctaggct	gactcaggac	ccatctatga	taaacacctat	3540
gctgggtgga	gactagggtt	gtttgtcttc	tctcaagaaa	tggtgttctt	ctctgacctg	3600
aaatcagaa	gtagagatcc	ctaatacatca	aattgtttgat	tgaagagctg	atcataaaac	3660
aatgtcggta	ttgcaccttc	tggaaactatg	ggcttgagaa	aaacccagg	atcacttctc	3720
cttggcttcc	ttcttttctg	tgcttgcatc	agtggtggact	cctagaacgt	ggcactctgc	3780
tcaagaaaa	gcagtttttc	aaaacagact	catcagcatt	cagcctccaa	tgaataagac	3840
atcttccaag	catataaaca	atgtcttttg	tttcttttg	aaaaagcatc	tattgtcttc	3900
agttgggaag	gtgcccattc	cactctgcct	ttgtcacaga	gcagggtgct	attgtgaggc	3960

cattctctgag	cagtggaactc	aaaagcatttt	tcaggcatgt	cagagaaggg	aggactcact	4020
agaattatgca	aacaaaacac	cctcgacatc	ctctctcagg	aaacacgggga	gcagaggcca	4080
aagcactaag	gggaggggcgc	atacccgaga	cgattgtatg	agaaaaatct	gaggagactg	4140
ttcatagtctc	ggctactaagt	catttttcagg	ggattgaaag	actattgtctg	gattttcatga	4200
tgtcgactggt	cgttagctga	ttaaacctgt	taaataggca	cttaaataga	agcaggaaag	4260
ggagacaaaag	actggcttctc	ggacttctctc	cctgatcccc	accctatact	atcaccttgc	4320
agtgggcaga	attaggggaat	cagaatacaa	ccagtgtaag	gcagtgctgc	ctgcacctgc	4380
ctggtgcacat	tgaatttgggt	ggcttctatc	tagagtgtac	ttgtgcagat	gtacaggaaa	4440
aataggaaaa	cttaccactc	cagtgagcac	cagctgcctc	ccaaaggagg	ggcagccgtg	4500
cttatattttt	tatgggttaca	atggcacaata	attattatca	acctaaacta	aaacttcttt	4560
ttctcttttt	tcogtaatta	ctaggtagtt	ttctaattct	ctcttttggg	agtagtatgt	4620
ttttaaagtct	tttactgatgt	aaaattattt	ttttttactt	attctgggaag	atctggctga	4680
aggaattatc	atggaacagg	aagaagcgta	aagactatct	atgtcatctt	tgttgagagt	4740
cttcgtgact	gttaagatgt	aaatacacagt	tatttattaa	ctctgttctg	cctggaaatt	4800
taggcttcatc	acggaaagtg	tttgagagca	agtagttgac	attatacagc	aaactctctg	4860
caagaacagc	atacaggaaa	tcagctcta	aagctgctct	ggcccttgtg	ctcagagtgg	4920
atgttatggg	attccttttt	ttcttgtttt	atcttttcaa	gttgaattgt	ttggttatcc	4980
tttctgcaat	gtttttaatt	gcgaagaaag	ccatggaggtc	ttcaattctt	ttttacccca	5040
tcctctgtgc	atatttccag	ggagaaggaa	agcatataca	tttttttctt	tcattttccc	5100
aaaagagaaa	aaaatgacaa	aagggtgaac	ttacatacaa	atattacctc	atttgtttgtg	5160
tgactgagta	agaattttttt	ggatcaacgc	gaaagagatt	aagtgctcta	caaacttaaa	5220
gcactgtagt	tacctaaaaa	gtcagttgtg	ttcagtagtt	aaaaactctg	cagagaagta	5280
ttcccaataa	ggaataatgca	ttgaaatgtt	aaatacaatt	tctgaaagtt	atgtttttttt	5340
ttctatcatct	gggtataccat	tgtctttatt	ttataaattt	ttttctgatt	gccattggaa	5400
tagaatattc	agatttgtgta	gatatgtcat	ttaaataatt	tatcaggaaa	tactgcctgt	5460
agagttagta	tgttctatttt	tatataatgt	ttgcacactg	aattgaagaa	ttgtgtggttt	5520
ttttctttttt	ttgtttttttt	tttttttttt	tttttttttg	ctttggaact	cccatttttt	5580
ctattttgcca	atacctttttt	ctaggaaatgt	gctttttttt	gtacacattt	ttatccattt	5640
tacattctata	agcagttgt	gttgttatatt	actgtttctt	atgtacaagg	aacacaataa	5700
aatcatatac	aaatttatatt	tt				5720

```
<210> 49
<211> 2330
<212> DNA
<213> Homo sapiens
```

<400> 49						
gtgagcgtgt	gtgcgtgcgt	ctacttttga	ctgggaagaa	cacagcccat	gtgctctgca	60
tggacgttat	tgatactctg	tttagcttga	ttttcgaaaa	gcaggccaaga	tgctcagcac	120
accacatgac	ccctctctatt	cttctctctt	cggcccat tt	tataggaggc	atacaccata	180
catgtgtacag	ccagagtacc	gaatcatatga	gatgaacagt	agactgcagt	ctgcacaga	240
ggatagtgtac	aaacctctgt	gggacgcctt	tgccactgaa	ttttttgagc	atgacgccac	300
attaacctct	tcatttttgt	tggaaagtgg	accaaaagcg	tacactatcg	gcaggaccct	360
catcccccg	tacttttagca	ctgtgtttga	aggagggggt	accgacctgt	attacattct	420
caaacactcg	aaagagtcat	accacaactc	atccatcacg	tggagactgcg	accaggtgac	480
catggtcaac	cagcagcgga	agcccatgtg	taccaaagta	tgtaacgaag	gcagactgat	540
cttggagttc	acccttgatg	atctcatgat	aatcaaaaac	tggcaattta	ccattagaca	600
ataccgagag	ttagtcccca	gaagcatcct	agccatgcac	gcacaagatc	ctcagggtcct	660
ggatcagctg	tcaataaaca	tcaccaggat	ggggcttaaca	aaacttcacc	tcacactcct	720
caggtgttgt	gtcaatttgg	agccaatgca	gggaactgat	tcgagataca	aaacttcaaa	780
cctcagtcct	cgagactgcc	tgaaagacct	cttgtttcag	aagtggcaga	ggatgggtgg	840
tcgccgacga	gaaccacaca	ggccaaccaa	accaaaacgg	agaaaagagg	aaaattccac	900
cagcagacat	tcacaacaga	gcgctgggaa	caatgcgaac	agcattggca	gcgaagaaga	960
gaccacagct	gcaaacctga	gtctgtccag	tcaggtacct	gatgtgatgg	tgttaggaga	1020
gccaaactct	atgggaggtg	agtttggggg	cgaggacgaa	aggctaatca	ctagattaga	1080
aaacacgcaa	tatgtgcggg	ccaacggctg	ggacgacgag	gaggacttca	acaattcaac	1140
cgcgctgggg	aaacaacagc	cgtgtgaacg	taaacctccc	gccactcaag	agaccaaact	1200
agaaaacccc	ccaccccagg	cttccaatac	agatgatcgg	accagaatat	cactgtcaat	1260
agggccgtgg	gtgatcatata	caattgcaaa	ctctttactta	caggagagac	aacagaagag	1320
ataaaactct	ttccatgtga	atatctattt	ctaaaccaca	atgatctgat	ttctcttctt	1380
ctttcttttt	ttctaattga	caaqattatt	cccagtaaac	ttcatgtacc	cttctcttga	1440

ggccttcaca	ggtaatacac	atactggcac	tgattgtaat	taaaatgaga	gaaaactcta	1500
gcgcaccttc	tggcacgggt	ttaacaacgt	gtttgtgttg	aatttccttt	tatgcatca	1560
aacgaagggc	atattgtcca	taaatgtcca	gtgctcagga	tctcattaat	atgccgaacc	1620
taactacaga	tgacttttta	atattgtaaa	atattttctg	ctttttgact	tgcatctgag	1680
agtttcttgt	ttcagtaaaa	aaagaaaaga	caaaaaaatc	agctttggaa	agtaatttaa	1740
atgtacctta	tttttttttt	ctttatgttt	tctttcattg	ggcaacagct	aagagggccc	1800
agcaaggtaa	tttatgggtg	agctgatgtc	aattgggtct	tgctttgagt	cgactcaatt	1860
tagcccaagt	gctgaaacaa	gaaatgtcat	ttttttcatc	aaagacacca	ggcagagatt	1920
ttaatgaag	aaagacaatt	ggacccttaa	gaatttatgc	atttgtaaag	ttgctgttga	1980
tccaaatatt	ttcaagccat	gtaatccatt	ggttttgtgg	gcagtttaat	aaacctgaac	2040
ctttgtgtgt	tttctaattg	tacctgagtt	gaccatcctt	tctttttata	gtatatttct	2100
tgatgatgat	tttgtaaagc	tctcacctgg	ttcttttatg	gggacttttc	gtttttgggc	2160
aactccagt	tatttatgtg	aaactttata	agagaattaa	tttttccatt	tgcatattaa	2220
tatgttcctc	cacacatgta	aaggcacagt	ggctccgtgt	gttaaaaaac	agctgtattt	2280
tatgtatgct	ttactgataa	gtgtgccaat	aataaactgt	gttaatgacc		2330

<210> 50
 <211> 622
 <212> DNA
 <213> Homo sapiens

<400> 50						
ggcacgagct	cgtgccggcg	ttcagttggt	tcgggacgcg	ccgagctctcg	ccgctcttcc	60
agcggtctcg	ctgccagagc	tagcccgagc	ccgggtctcg	ggcgaaaaat	cctgcccttc	120
acatcgaaag	tttgccagag	aagggaaaaac	tgaaaatgga	agttgagcag	cttcgcaaag	180
tgatgaagtt	gcagagacaa	caagtgtcta	aatgttctga	agaaaataag	aactatatgt	240
aagaaagttc	tggagaggat	cctctagtta	agggaaatcc	agaagacaa	aacctcttga	300
aagaaaaagg	cagctgtggt	atttcataaa	taacttgga	gaaactgcat	cctaagtgga	360
agaactagtt	tgtttttagtt	ttcccagata	aaaccaacat	gcttttttaag	gaaggaagaa	420
tgaaattaaa	aggagacttt	cttaagcacc	atatagatag	ggttatgtat	aaaagcatat	480
gtgctactca	tctttgctca	ctatgcagtc	ttttttaaga	gagcagagag	tatcagatgt	540
acaattatgg	aaataagaac	attacttgag	catgacactt	ctttcagtat	attgcttgat	600
gcttcaaat	aagttttgtc	tt				622

<210> 51
 <211> 2500
 <212> DNA
 <213> Homo sapiens

<400> 51						
cgggggggtc	ttggctgtgt	gtctgcggat	ctgtagtggc	ggcgggcgcg	gcggcgggcg	60
ggaggcagac	ggcgcgagg	cgggcgagg	agcaggcgcg	ggcggtggcg	gcggcggtta	120
gacatgaacg	ccgcttcggc	gcccggcggt	cacggagagc	ccctctctcg	gcgcggggcg	180
tttgtgtgat	tttgctaaaa	tgcatcacca	acagcgaatg	gctgccttgc	ggacggacaa	240
agagctgagt	gatttactgg	atttcagtgc	gatgttttca	cctcctgtga	gcagtgaggaa	300
aaatggacca	actcttttgg	caagtggaca	ttttactggc	tcaaatgtga	aagacagaag	360
tagctcaggg	tcttggggga	atggaggaca	tccaagcccg	tccaggaact	atggagatgg	420
gactcccat	gaccacatga	ccagcaggga	ccttgggtca	catgacaatc	tctctccacc	480
ttttgtcaat	tcagaaatc	aaagtaaaac	agaaaagggc	tcatactcat	cttatggggag	540
agaaatcaac	ttacaggggt	gccaccagca	gagctctcct	ggaggtgaca	tggatgatgg	600
caaccaggga	accctttcgc	ccaccaaac	tggttccag	tactatcagt	attctagcaa	660
taatccccga	aggaggcctc	ttcacagtag	tgccatggag	gtacagacaa	agaaagtctg	720
aaaagtctct	ccaggtttgc	catcttcagt	ctatgctcca	tcagcaagca	ctgcgcgacta	780
caatagggac	tcggcaggct	atccttctct	caaaccagca	accagcactt	tccctagctc	840
cttcttcatg	caagatggcc	atcacagcag	tgacccttgg	agctcctcca	gtgggatgaa	900
tcagcctggc	tatgcaggaa	tgttggggca	ctcttctcat	attccacagt	ccagcagcta	960
ctgtagcctg	catccacatg	aacgtttgag	ctatccatca	cactcctcag	cagacatcaa	1020
ttccagtcct	cctccgatgt	ccactttcca	tcgtagtgg	acaaacattg	acagcacctc	1080
ttctctgtag	cctcctgcca	acgggacaga	cagtataatg	gcaaatagag	gaagcggggc	1140
agccggcagc	tcccagactg	gagatgctct	ggggaaagca	cttgcttcga	tctattcttc	1200
agatcacact	aacaacagct	tttcatcaaa	cccttcaact	cctgttggct	ctcctccatc	1260

tctctcagca	ggcacagctg	tttgggtctag	aatgggagga	caggcctcat	cgtctcctaa	1320
ttatgaagga	cccttacact	ctttgcaaa	ccgaattgaa	gatcggttag	aaagactgga	1380
tgatgctatt	catgttctcc	ggaaccatgc	agtggggcca	tccacagcta	tgctgtgtgg	1440
tcatggggac	atgcattgaa	tcatttggacc	ttctcataat	ggagccatgg	gtggtctggg	1500
tcagggtgat	ggaaccgggc	ttctttcagc	caacagacat	tcactatggt	tggggaccoca	1560
tcgtgaagat	ggcgtggccc	tgagaggcag	ccattctctt	ctgccaacac	aggttccggg	1620
tcacacagctt	cctgtccagt	ctgcgacttc	ccctgacctg	aaccaccccc	aggaccctta	1680
cagaggcatg	ccaccaggac	tacaggggca	gagtgtctcc	ttggcgactg	ctgagatcaa	1740
atccgatgac	gaggggtgatg	agaacctgca	agacacgaaa	tcctcggagg	acaagaaatt	1800
agatgacgac	aagaaggata	tcaaatcaat	tactagcaat	aatgacgatg	aggacctgac	1860
accagagcag	aaggcagagc	gtgagaagga	gcggaggatg	gccacaatg	cccagagcgg	1920
tctgctgggtc	cgtgacatca	acgaggcttt	caaagagctc	ggccgcatgg	tgacgctcca	1980
cctcaagagt	gacaagcccc	agaccaagct	cctgatcttc	caccaggcgg	tggccgtcat	2040
cctcagtcgt	gagcagcaag	tcggagaaag	gaatctgaat	ccgaaagctg	cgtgtctgaa	2100
aagaagggag	gaagagaagg	tgtctctcga	gcctccccct	ctctcctctg	ccggcccaca	2160
ccctggaatg	ggagacgcac	cgaatcacat	gggacagatg	taaaagggctg	caagttgcca	2220
cattgtctta	ttaaaaacaag	agaccacttc	cttaacagct	gtattatctt	aaaccacat	2280
aaacacttct	ccttaaccctc	catttttgta	atataagaca	agtcctgagta	gttatgaatc	2340
cgacacgcaa	gaggtttcag	tactcccaat	tatcaaaaaa	cagaaaaaca	aaaaaaagaa	2400
agaaaaaagt	gcaacttgag	ggacgacttt	ctttaacata	tcattcagaa	tgtgcaaaag	2460
agtatgtaca	ggctgagaca	cagcccagag	actgaacggc			2500

<210> 52
 <211> 2875
 <212> DNA
 <213> Homo sapiens

<400> 52						
gaattctccg	gagctgaaaa	aggatcctga	ctgaaagcta	gaggcattga	ggagcctgaa	60
gattctccag	tttttaagac	ctctagagtg	caaagaagac	tttgaagtgt	gaaaacattct	120
cctgtaattg	aaaccaaaat	gtcatttata	gatccttacc	agcacattat	agtggagcac	180
cagtatcccc	acaagtttac	ggtagtgggt	ttacgtgcc	ccaaagtgc	aaagggggcc	240
tttgggtgca	tgcttgatgc	tcacgatccc	tatgtggaa	tttttatctc	tacaaccctt	300
gacagcagga	agagaacaag	acatttcaat	aatgacataa	accctgtgtg	gaatgagacc	360
tttgaattta	ttttggatcc	taatcaggaa	aatgttttgg	agattacggt	aatggatgac	420
aattatgtca	tggatgaaac	tctaggggaca	gcaacattta	ctgtatcttc	tatgaagggtg	480
ggagaaaaga	aagaagtctc	ttttatcttc	aaccaagtca	ctgaaatggt	tctagaaatg	540
tctcttgaag	tttgtctcag	cccagacctc	cgatttagta	tggctctgtg	tgatcaggag	600
aagactttca	gacaacagag	aaaagaacac	ataagggaga	gcataagaa	actcttgggt	660
ccaaagaata	gtgaaggatt	gcattctgca	cgtgatgtgc	ctgtggtagc	catatgggt	720
tcagggtggg	gtttccgagc	catgggtggg	ttctctgggt	tgatgaaggc	attatacgaa	780
tcaggaaattc	tggattgtgc	taoctacggt	gctggtcttt	ctggctccac	ctggtatatg	840
tcacacttgt	attctcacc	tgattttcca	gagaaagggc	cagaggagat	taatgaagaa	900
ctaattgaaa	atgtttagcca	caatccccct	ttacttctca	caccacagaa	agtttaaaaga	960
tatgttgtag	ctttatggaa	gaagaaaagc	cttggaacaa	ctgtcacctt	tactgacatc	1020
tttgggatgt	taatatggaga	aacactaatt	cataatagaa	tgaatactac	cttgaagcag	1080
ttgaaggaaa	aagttaatat	tgacacatgc	ccctttacct	ttttcacctg	tcttcatgtc	1140
aaacctgacg	tttcagagct	gatgttttga	gattgggttg	aatttagtcc	atacgaaatt	1200
ggcatggcta	aatatggtac	ttttatggct	ccgacttat	ttggaagcaa	attttttatg	1260
ggaacagtcg	ttaagaagta	tgaagaaaac	cccttgcat	tcctaatggg	tgtctggggc	1320
agtgcccttt	ccatatttgt	caacagagtt	ttggggcggt	ctggttcaca	aagcagaggc	1380
tcacaaatgc	aggaagaatt	agaaaaat	accacaaaag	atatgtgtag	taatgatagc	1440
tcggacagtg	atgatgaatc	acacgaaccc	aaaggcactg	aaaaatgaag	tgctgggaagt	1500
gactatcaaa	gtgataatca	agcaagtttg	attcatcgta	tgataatggc	cttgggtaggt	1560
gattcagcct	tattcaaatc	cagagaagga	cgtgctggga	aggatcacaca	cttcatgctg	1620
ggcttgaaat	tcaatacatc	ttatccactg	tctcctttga	gtgactttgc	cacacaggag	1680
tcctttgatg	atgatgaact	ggatgcagct	gtagcagatc	ctgactgaat	tgagcgaata	1740
tatgagcctc	tggatgtcaa	aagtaaaaag	attcatgtag	tggacagtg	gctcacattt	1800
aaccttcgct	attcccttgat	actgagacac	cagagagggg	ttgatctcat	aatctccctt	1860
gaactttctg	caaggccaag	tgactctagt	cctccgttca	aggaactctc	actctgcaga	1920
aagtgggccta	aaatgaacaa	gctccccctt	ccaaagattg	atccttatgt	gtttgatcgg	1980

gaagggctga	aggagtgc	tgtctttaa	cccaagaatc	ctgatatgga	gaaagattgc	2040
ccaaccatca	tccactttgt	tctggccaac	atcaacttca	gaaagtacaa	ggctccagg	2100
gttccaagg	aaactgagga	agagaaaaga	atcgctgact	ttgatatttt	tgatgaccca	2160
gaatcaccat	tttcaacctt	caattttcaa	tatccaaatc	aagcattcaa	aagactacat	2220
gatcttatgc	acttcaatc	tctgaacaac	attgatgtga	taaaagaagc	catggttgaa	2280
agcattgaat	atagaagaca	gaatccatct	cgttgctctg	tttcccttag	taatgttgag	2340
gcaagaagat	ttttcaacaa	ggagtttcta	agtaaaccca	aagcatagtt	catgtactgg	2400
aaatggcagc	agtttctgat	gctgaggcag	tttgcaatcc	catgacaact	ggatttataa	2460
gtacagtaca	gatagtcgta	ctgatcatga	gagactggct	gatactcaaa	gttgacagtta	2520
cttagctgca	tgagaataat	actattataa	gttaggtgac	aaatgatggt	gatttatgtaa	2580
ggatataact	agctacattt	tcagtcagta	tgaacttcc	gatacaaatg	tagggatata	2640
tactgtattt	ttaaacattt	ctcaccaact	ttcttatgtg	tggtcttttt	aaaaattttt	2700
tttcttttaa	aatattttaa	agttcaatct	caataagacc	tcgcattatg	tatgaatggt	2760
attcactgac	tagattttatt	gataacacta	ttttttatta	tatatgcata		2820
tatatacata	catgaaataa	atacatcaat	ataaaaaata	aaaaaacg	aattc	2875

<210> 53
 <211> 1142
 <212> DNA
 <213> Homo sapiens

<400> 53						
gcccgcagcg	gctttctcgg	acgccttgcc	cagcgggccc	cccgaacccc	tgacccatgg	60
acccgcctcg	ccccctggg	ctgtcgattc	tgctgctttt	cctgacggag	gctgcactgg	120
gcgatgctgc	tcaggagcca	acaggaaaata	acgcggagat	ctgtctcctg	ccccatgact	180
acgggacccg	cggggcccta	cttctccggt	actactacga	caggtacacg	cagagctgcc	240
gccagttcc	gtacggggcg	tgccgaggca	acgcccaaaa	tttctacacc	tgaggaggct	300
gcgacgatgc	ttgctggagg	atagaaaaag	ttcccaaagt	ttgcgggctg	caagtggagt	360
tgagcagaca	gtgtgagggg	tccacagaaa	agtattttct	taatctaagt	tccatgacat	420
gtgaaaaaatt	ctttccggt	gggtgtcacc	ggaacccgat	tgagaaacag	tttccagatg	480
aagctacttg	tatgggcttc	tgccgaccaa	agaaaattcc	atcattttgc	tacagtccaa	540
aagatgaggg	actgtgctct	gccaatgtga	ctcgctatta	ttttaatcca	agatacagaa	600
cctgtgatgc	tttccactat	actggctgtg	gagggaaatga	caataacttt	gttagcaggg	660
aggattgcga	acgtgcgatg	gcaaaagctt	tgaaaaagaa	aaagaagatg	ccaagcttc	720
gttttgcag	tgaattccgg	aaaattcggg	agaagcaatt	ttcaaacatc	ttaatatgtc	780
atcttgtttg	tttttatggt	ttatttgctt	ttatgggtgt	atctgaagaa	taatatgaca	840
gcatgaggaa	acaaatcatt	ggtgatattt	tcaccagttt	ttattaatc	aagtcacttt	900
ttcaaaaaatt	tggatttttt	tatatataac	tagctgctat	tcaaatgtga	gtctaccatt	960
tttaatttat	ggttcaactg	tttgtgagac	gaattcttgc	aatgcataag	atataaaagc	1020
aaatatgact	cactcatttc	ttgggggtgt	attcctgatt	tcagaagagg	atcataactg	1080
aaacaacata	agacaacata	atcatgtgct	tttaacata	ttgagaataa	aaaggactag	1140
cc						1142

<210> 54
 <211> 7787
 <212> DNA
 <213> Homo sapiens

<400> 54						
gagacaaagg	ctgccgtcgg	gacggggcag	ttagggactt	gggtttgggc	gaacaaaagg	60
tgagaaggac	aagaagggac	cggggcgatg	cagcagggga	cccccgccgg	gcgcgcgtct	120
cgggagtgcc	gcgctgacac	gcatggtttc	cccggaaccc	cggcgccgct	gacttccgcg	180
agtcggagcg	gcactcggcg	agtcggggac	tgccgtggaa	caatggataa	cttcttcacc	240
gagggaaacac	gggtctggct	gagagaaaat	ggccagcatt	ttccaaagta	tgtaaattcc	300
tgtgcagaag	gcactcgtct	cttccggaca	gactatggct	aggatttcac	ttacaagcag	360
agcacaatta	cccaccagaa	gggtgactgt	atgcacccca	cgaacgagga	gggctgggat	420
gacatggcgt	ccttgacaga	gtcccatggc	ggctccatca	tgtataaact	attccagcgt	480
tataagagaa	atcaaatata	tacctacatc	ggctccatcc	tgccctccgt	gaacccctac	540
cagcccacgc	cggggctgta	cgagcctgcc	accatggagc	agtacagccg	gcgccacactg	600
ggcgagctgc	cccgcacatc	cttcgccatc	gccaacgagt	gctaccgctg	cctgtgggaag	660
cgctacgaca	accagtgcac	cctcatcagt	ggtgaaagtg	gggcaggtaa	aaccgaaagc	720

actaaattga	tcctcaagtt	tctgtcagtc	atcagtcac	agtctttgga	attgtcctta	780
aaggagaaga	catcctgtgt	tgaacgagct	attcttgaaa	gcagcccat	catggaagct	840
ttcggcaatg	cgaagaccgt	gtacaacaac	aactctagtc	gctttgggaa	gtttgttcag	900
ctgaacatct	gtcagaaagg	aaatatctag	ggcgggagaa	ttgtagattt	tttattagaa	960
aaaaaccgag	tagtaaggca	aatcccggg	gaaaggaatt	atcacatatt	ttatgcactg	1020
ctggcagggc	tggaaatga	agaaagagaa	gaattttatt	tatctacgcc	agaaaaactac	1080
cactacttga	atcagtcctg	atgtgtagaa	gacaagacaa	tcagtgacca	ggaaatccttt	1140
aggggaagtta	ttacggcaat	ggacgtgtgt	cagttcacga	aggaggaagt	tcgggaagtgt	1200
tcgaggctgc	ttgctgggtat	actgcactct	gggaacatag	aatttatcac	tgctgggtggg	1260
gcacaggttt	ccttcaaaac	agctttgggc	agatctgcgg	agttacttgg	gctggaccaca	1320
acacagctca	cagatgcttt	gacccagaga	tcaatgttcc	tcaggggaga	agagatcctc	1380
acgcctctca	atgttcaaca	ggcagtagac	agcagggact	ccctggccat	ggctctgtat	1440
gcgtgctgct	ttgagtggtt	aatcaagaag	atcaacagca	ggatcaaaag	caatgaggac	1500
ttcaagtcta	ttggcatcct	cgacatcttt	ggatttgaaa	actttgaggt	taatcacttt	1560
gaacagtctta	atataaacta	tgcacacgag	aaacttcagg	agtacttcaa	caagcatatt	1620
ttttctttag	aacaaactaga	atatagccgg	gaaggattag	tttggggaaga	tattgactgg	1680
atagacaatg	gagaatgcct	ggacttgatt	gagaagaaac	ttggcctcct	agcccttata	1740
aatgaagaaa	gccatttttcc	tcaagccaca	gacagcacct	tattggagaa	gctacacagt	1800
cagcatgcga	ataaccactt	ttatgtgaag	ccagagattg	cagttaacaa	ttttggagtgt	1860
aagcactatg	ctggagaggt	gcaatatgat	gtccgaggtt	tcttgagagaa	gaacagagat	1920
acatttccag	atgaccttct	caattttgcta	agagaaagcc	gatttgactt	tatctacgat	1980
ctttttgaac	aaagcttcaag	ccgcaacaac	caggatacct	tgaatgttgg	agacaaacat	2040
cgccggccta	cagtcagctc	acagttcaag	gactcactgc	attccttaat	ggcaacgccta	2100
agctcctcta	atcctttctt	tgttcgtgtg	atcaagccaa	acatgcagaa	gatgccagac	2160
cagtttgacc	aggcgggtgt	gctgaaccag	ctgcggtact	cagggatgct	ggagactgtg	2220
agaatccgca	aaagctgggtt	tgcggtccga	agacccttcc	aggactttta	caaaagggat	2280
aaagtgtctga	tgaggaaatc	ggctctgctc	gaggacgtcc	gagggaaagt	ccagagctgt	2340
ctgcagctct	atgatgcctc	caacagcgag	tggcagctgg	ggaagaccaa	ggtctttctt	2400
cgagaatcct	tggaaacagaa	actggagaag	cggaagggaag	aggaagttag	ccacgcggcc	2460
atggtgattc	gggcccatgt	cttgggcttc	ttagcacgaa	aaacaatacag	aaaggtcctt	2520
tatttgtgtgt	tgataataca	gaagaattac	agagcattcc	ttctgaggag	gagatttttg	2580
cacctgaaaa	aggcagccat	agttttccag	aagcaactca	gaggtcagat	tgctcggaga	2640
gtttacagac	aatttgtctggc	agagaaaagg	gagcaagaag	aaaagaagaa	acaggaagag	2700
gaagaaaaag	agaaaacggga	ggaagaagaa	agagaaagag	agagagagcg	aaaggaagcc	2760
gagctccgcy	ccacagcaga	agaagaaaacg	aggaagcagc	aagaactcga	cgccttgacg	2820
aagagccaga	aggaagctga	actgaccctg	gaactggaga	aacagaagga	aaataagcag	2880
gtggagagaga	tcctccgtct	ggagaaagaa	atcgaggacc	tcgacgcgat	gaaggagcag	2940
caggagctgt	cgctgaccga	ggcttccctg	cagaagctgc	aggagccggc	ggaccaggag	3000
ctcccgaggc	tggaggagga	agcgtgcagg	gcggcccagg	agttccctga	gtccctcaat	3060
ttcgacgaga	tcgacgagtg	tgtccggaat	atcgagcggg	ccctgtcggt	gggaagcgaa	3120
ttttccagcg	agctggctga	gagcgcatgc	gaggagaagc	ccaacttcaa	cttcagccag	3180
ccctaccagg	aggaggaggt	cgataggggc	ttcgaaagcg	acgacgacgc	cttcaaggac	3240
tcccccaacc	ccagcgagca	cgccactca	gaccagcgaa	caagttggcat	ccgaccagc	3300
gatgactctt	cagaggagga	cccatacatg	aacgacacgg	tgggtgccac	cagccccagt	3360
gcggacagca	cggtgtctgt	cgccccatca	gtgcaggact	ccgggagcct	acacacctcc	3420
tccagcggcg	agtcacacta	ctgcattgcc	cagaacgctg	gggacttgcc	ctccccagac	3480
ggcgactacg	actacgacca	ggatgactat	gaggacgggt	ccatcaactc	cggcagcagc	3540
gtgactcttc	ccaactccta	cgccagccag	tgggtccccg	actaccgtgc	ctctgtgggg	3600
acctacaaca	gctcgggtgc	ctaccgggtt	agctctgagg	gggcgcagtc	ctcgtttgaa	3660
gatagtgaag	aggactttga	ttccaggttt	gatacacagt	atgagcttcc	ataccggcgt	3720
gactctgtgt	acagctgtgt	cactctgcct	tattttccaca	gctttctgta	catgaaaggt	3780
ggcctgatga	actcttgtaa	acgcccgttg	tgcgtcctca	aggatgaaac	cttcttgtgg	3840
ttccgctcca	agcaggaggc	cctcaagcaa	ggctggctcc	acaaaaaagg	ggggggctcc	3900
tccacgtgtg	ccaggagaaa	ttggaagaa	cgctgggttg	tcctccgcca	gtccagctgt	3960
atgtactttg	aaaacgcag	cgaggagaag	ctcaagggca	ccgtagaagt	gcgaacggca	4020
aaagagatca	tagataaac	caccaaaggag	aatgggatcg	acatcatatt	ggccgatagg	4080
actttccacc	tgtattgcaga	gtccccagaa	gatgccagcc	agtgttccag	cgctgtgagt	4140
caggtccacg	cgctccacgga	ccaggagatc	caggagatgc	atgatgagca	ggcaaaccca	4200
cagaatgctg	tgggcacctt	ggatgtgggg	ctgattgatt	ctgtgtgtgc	ctctgacagc	4260
cctgataagac	ccaactcggt	tgtgatcatc	acggccaacc	gggtgctgca	ctgcaacgcc	4320
gacacgccgg	aggagatgca	ccactggata	accctgctgc	agaggtccaa	aggggacacc	4380

agagtggagg	gccaggaatt	catcgtgaga	ggatgggttc	acaaagaggt	gaagaacagt	4440
cgaagatagt	cttcactgaa	actgaagaaa	cggtgggttc	tactcaccca	caattccctg	4500
gattactaca	agagttcaga	gaagaacgcg	ctcaaaactgg	ggaccctggg	ctccaacagc	4560
ctctgtctctg	tcgtccccc	agatgagaag	atattcaaaag	agacaggcta	ctggaacgtc	4620
accgtgtacg	ggcgcaagca	ctgttacccg	ctctacacca	agctgctcaa	cgaggccacc	4680
cggtgggtcca	gtgcgcattca	aaacgtgact	gacaccaagg	ccccctatga	cacccccacc	4740
cagcagctga	tccaagatat	caaggagaac	tgccctgaact	cggatgtggg	ggaacagatt	4800
tacaagcgga	accgatccct	tcgatacacc	catcacccct	tgcaactccc	gtccctgccc	4860
cttcogtatg	gggacataaa	tctcaacttg	ctcaaagaca	aaggctatac	cacccttcag	4920
gatgaggcca	tcaagatatt	caattccctg	cagcaactgg	agtcctatgc	tgacccaatt	4980
ccaataatcc	agggcatcct	acagacaggg	catgacctgc	gacctctgcg	ggacgagctg	5040
tactgccagc	ttatcaaaaa	gaccaacaaa	gtgccccacc	ccggcagtg	ggggcaacctg	5100
tacagctggc	agatcctgac	atgcctgagc	tgccaccttc	tgccgagctg	agggattctc	5160
aagtatctca	agttccatct	gaaaaggata	cgggaacagt	ttccagggaac	cgagatggaa	5220
aaatacgcct	tcttcactta	cgaatctctt	aagaaaacca	aatgccgaga	gtttgtgcct	5280
tcccgagatg	aaatagaagc	ctctgaccac	aggcaggaaa	tgacatccac	ggctctattgc	5340
catggcggcg	gtctctcgaa	gattcacatc	aaactccaca	ccactgctgg	ggagggtgtg	5400
gagaagctga	tcgagggcct	ggccatggag	gacagcagga	acatgtttgc	tttgtttgaa	5460
tacaacggcc	acgtcgacaa	agccattgaa	agtcgaaccg	tcgtagctga	tgtcttagcc	5520
aagtttga	agctggctgc	cacatccgag	gttggggacc	tgccatggaa	attctacttc	5580
aaactttact	gtcttcctgga	cacagacaa	gtggcaaaag	acagtgtgga	gtttgcattt	5640
atgtttgaac	agggccacga	agcggttatc	catggccacc	atccaggccc	tggaagaaaac	5700
ctccagggttc	ttgctgcctt	gcgactccag	tatctgcagg	gggattatac	tctgcacgct	5760
gccatcccac	ctctcgaaga	ggtttatttc	ctgcagagac	tcaaggcccg	catcagccag	5820
tcaaccacaaa	ccttcacccc	ttgtgaacgg	ctggagaaga	ggcggacgag	cttcttagag	5880
gggacctga	ggcggagcct	ccggacagga	tccgtggctc	ggcagaaggt	cgaggaggag	5940
gaagtgcctg	acatgtggat	taaggaaaga	gtctcctctg	ctcagacgat	catcattgac	6000
aagtggaggga	aatttcaggg	aatgaaccag	gaacaggcca	tggccaagta	catggccttg	6060
atcaaggaggt	ggcctggcta	tggtctcgag	ctgtttgatg	tggagtgcac	ggaagggtgc	6120
ttccctcagg	aaactctggtt	gggtctcagc	gcggacgcgc	tctccgtcta	caagcgtgga	6180
gagggaaagac	cactggaagt	cttcacgtat	gaacacatcc	tctcttttgg	ggcacccttg	6240
gcgaatacgt	ataagatcgt	ggctcagtag	agggagctgc	tctttgaaac	cagtggagtg	6300
gtggatgtg	ccaagctcat	gaagacctac	atcagcatga	tcgttgaaag	gcgctacagc	6360
acgacacgct	ccgccagcag	ccagggcagc	tccagggtga	ggcgggacag	agccccacctg	6420
tctttgtctac	ctgaacgcac	caccctctgg	cctaggctgg	ctccagtgctg	catcgccacc	6480
ccaaaacaaa	ccagagctgt	ccagagcctt	ctggaaagctt	ctggctctgag	ggaggtgtct	6540
ccgaggatcc	ttttgctctg	cgctctcatt	gatcctgtat	taagctgtca	actttaacag	6600
tctgcacagt	ttccaaaagt	ttactactct	tagaggacac	atgccttaaa	aaaggagggg	6660
aggaaccacg	ctgccaccaa	agcagccgga	agtgccctaa	cttgtggaac	caacactaat	6720
cgacogtaac	tgtgctactg	aagggaaactg	cctttccccc	tcttggggga	gacttaacag	6780
agcgttgaag	gggggcattc	tctgtcaatg	atgcactaac	ctcccaacct	gatttccccg	6840
aatctgaggg	aaggtgaggg	agtggggaag	gggatggaga	gctcaggggg	acagtgtgtt	6900
tgagctggag	tgtctggggc	agcctttctc	atggaatgac	atgaatcaac	ttttttcttt	6960
gtttcatctt	ttaagtgtag	gtgctgtcct	gttcgtgcat	gtgttcatata	actcaacact	7020
ttaatcatgt	tttcatgacg	atataaaagc	aaagggaaaa	aggatgtgtg	atgggtgtaca	7080
cagttctgat	attttaataa	tcgacagcta	tagtctcaat	tgttacttta	gaaggtgggt	7140
ttattaacaa	acccaaatcc	tggatttttc	tgtctttgct	gtattttgaa	aaacacgtgt	7200
tgactccatt	gtttttacatg	tagcaaaagtc	tgccatctgt	gtctcgtgtg	ttataaacag	7260
ataagcagcc	tacaagataa	ctgtatttat	aaacctctg	tcaaacagctg	gctccagctg	7320
tggtttttaga	acaagaatga	agtcattttg	gagtccttca	tgtctaaaag	atttaagtta	7380
aaaacaaagt	gttacttgga	aggttagctt	ctatcattct	ggatagatta	cagatataat	7440
aacctagttg	actattgggg	agagacgtg	catctccagaa	acgtcttaac	acttgagtga	7500
atcttcaaag	gaccttgaca	ttaaagtctg	aggctttaat	acacacatat	tttatcccaa	7560
gtttataatg	tgggtctgaa	caaggcact	gtaaataaat	cagcatttat	gaccagaaga	7620
aaaataatct	ggctctggag	ttttttat	tatatggaaa	agttttaagg	acttggggcca	7680
actaagttcta	cccacacgaa	aaaagaatt	tgcttgtctc	ctttgtgtac	aaccttgcaa	7740
aactgtttgt	tggtccacag	aagttctgac	aataaaaagat	actagct		7780

<210> 55
 <211> 3018
 <212> DNA
 <213> Homo sapiens

<400> 55

gcacgagggg	acaacacctc	tctctscagc	agagagtgtc	acctcctgct	ttaggaccat	60
caagctctgc	taactgaatc	tcatccta	tgcaggatca	cattgcaaa	ctttcactct	120
ttcccacctt	gcttgtgggt	aaatctcttc	tgcggaatct	cagaaagtaa	agttccatcc	180
tgagaatatt	tcacaagaa	tttccttaag	agctggactg	ggctcttgacc	cctggaattt	240
aagaaattct	taagacaat	gtcaaatatg	atccaagaga	aaatgtgatt	tgagctcgga	300
gacaattgtg	catatcgtct	aataataaaa	acccatacta	gcctatagaa	aacaatatatt	360
gaataataaa	aacccatact	agcctataga	aaacaatatt	tgaaagattg	ctaccactaa	420
aaagaaaact	actacaactt	gacaagactg	ctgcaaaact	caattgggtca	ccacaacttg	480
acaaggttgc	tataaaaaca	gattgtctaca	acttctagtt	tatgtttatac	agcatatttc	540
atttgggctt	aatgatggag	aaaaagtgt	ccctgtattt	tctggttctc	ttgccttttt	600
ttatgattct	tgttacagca	gaattagaag	agagtcctga	ggactcaatt	cagttgggag	660
ttactagaaa	taaaatcatg	acagctcaat	atgaatgtta	ccaaaagatt	atgcaagacc	720
ccattcaaca	agcagaagcg	gtttactgca	acagaacctg	ggatggatgg	ctctgtcgga	780
acgatgttgc	agcaggaact	gaatcaatgc	agctctgccc	tgattacttt	caggactttg	840
atccatcaga	aaaagttaca	aagatctgtg	accaagatgg	aaactggttt	agacatccag	900
caagcaacag	aacatgggaca	aattataccc	agtgtaatgt	taacacccac	gagaaagtga	960
agactgcact	aaatttgttt	tacctgacca	taattggaca	cggatttgtct	attgcatcac	1020
tgcttatctc	gcttggcata	ttcttttatt	tcaagagcct	aagttgcaa	aggattacct	1080
tacacaaaaa	tctgttcttc	tcatttgttt	gtaactctgt	tgttaacaac	attcacctca	1140
ctgcagtgcc	caacaaccag	gccttagtag	ccacaatacc	tgttagttgc	aaagtgtccc	1200
agttcatcca	tctttacctg	atgggctgta	attacttttg	gatgctctgt	gaaggcattt	1260
acctacacac	actcattgtg	gtggccgtgt	ttgcagagaa	gcaacattta	atgtgggtatt	1320
attttcttgg	ctggggattt	ccactgatct	ctgcttgtat	acatgccatt	gctagaagct	1380
tatataccaa	tgacaattgc	ttgactcagtt	ctgatacca	ttctctctac	attatccatg	1440
gccccatttg	tgctgcttta	ctgggtgaatc	tttttttctt	gttaaatatt	gtacgcgttc	1500
tcacaccaca	gttaaaaagt	acacaccaag	cggaaatcaa	tctgtacatg	aaagctgtga	1560
gagctactct	tatcttgggt	ccattgcttg	gcatgtgaat	tgtgctgatt	ccatggcgac	1620
ctgaaggaaa	gattgcagag	gagggtatag	actacatcat	gcacatcctt	atgcacttcc	1680
aggggtcttt	gggtctctac	attttctgct	tctttaatgg	agagggtcaa	gcaattctga	1740
gaagaaaactg	gaatcaatac	aaaatccaat	ttggaaacag	cttttccaac	tcagaagctc	1800
ttcgtagtgc	gtcttacaca	gtgtcaacaa	tcagtgtatg	tcagggttat	agtcatgact	1860
gtcctagtga	acactttaat	ggaaaaagca	tcctatgatat	tgaaaatggt	ctcttaaaac	1920
cagaaaaattt	atataattga	aaatagaagg	atgggtgtct	cactgttttg	tgcttctcct	1980
aactcaagga	cttggaccaca	tgactctgta	gccagaagac	ttcaatatta	aatgactttg	2040
gggaatgtca	taaagaagag	ccttcacatg	aaattagtag	tgtgttgata	agagtgtaac	2100
atccagctct	atgtgggaaa	aaagaaatcc	tggtttgtaa	tgtttgtcag	taaatactcc	2160
cactatgcct	gatgtgacgc	tactaacctg	acatcaccaa	gtgtggaaat	ggagaaaagc	2220
acaatcaact	ttcttgagct	gggtgaagcc	agttccagca	caccattgat	gaattcaaac	2280
aaatgggtgt	aaaactaaac	atacatgttg	ggcatgatcc	taccttattt	cscaccaaga	2340
gacctaagta	aggtctataa	acatgaaagg	aaaattagct	tttagtttta	aaactcttta	2400
tcccatcttg	attggggcag	ttgacttttt	ttttttccca	gagtgccgta	gtcctttttg	2460
taactaccct	ctcaaatgga	caataccaga	agtgaattat	ccctgctggc	tttcttttct	2520
ctatgaaaag	caactgagta	caattgtttat	gatctactca	tttgctgaca	catcagttat	2580
atcttgtggc	atattccattg	tggaactcgg	atgaacagga	tgtataatat	gcaatcttac	2640
ttctatatca	ttaggaaaaa	atcttagttg	atgtgacaaa	acaccttgct	aacctcttcc	2700
tgtcttacc	aacagtgagg	gggaattcct	agctgtaaat	ataaattttg	cccttcattt	2760
tctactgtat	aaacaaatga	gcaatcattt	tataaaaga	aaatcaatga	aggatttctt	2820
attttcttgg	aattttgtaa	aaagaaattg	tgaaaaatga	gcttgtaaat	actccattat	2880
tttattttat	agtcctcaaat	caactacata	caacctatgt	aattttttaa	gcaaatatat	2940
aatgcaacaa	tgtgtgtatg	ttaatatctg	atactgtatc	tgggctgatt	ttttaataaa	3000
aatagagtct	ggaatgct					3018

<210> 56
 <211> 1341
 <212> DNA
 <213> Homo sapiens

<400> 56
 acgcggtccga agacattaag taaaaaattg gaactatgat ttttctttgt catttttttaa 60
 aaaagaatta ttttattaac ctgctggcat ataacttgga gttcttttca caaccttact 120
 ttttctgatt tgctttattg aatgattgaa tactcatttc tttctaaaaa tatgtttgtaa 180
 attctccctt ggcaagattt ctccctatga gggtagttat tatttgagtc tgccaagtgg 240
 ttaccatggg gcaagggtgcc atgatgtatt cttgggtgca ttggtttttt gcgcattgta 300
 aattttaagac acttatagta agtggactca ttcatagatg agtttcagaa ccttttacgt 360
 tctcggtaga ggcttctgtc ggacaggcag aagagtgtat tcctcacttt ttttttggtc 420
 ttcaaatcc agtaaggcat agcactttta agaaattaga atttttctat catctatgca 480
 aatgatattt atgttaatat taaatatcct atgttacact gggagtaatt tgagggtcaa 540
 ttatttttat tactactttg aatagaggac cattatcctt cttctctcag aaaactaaga 600
 agtaagtgtat acttttaaa taagtatata tcagtggagag taggctgtgt ttacaactat 660
 tcttagccag tgagttgtgt tttcatgtct catcaaaaaga caataaccaca ttgcatcatt 720
 ttacaaaaa ttgtgtcatt ttcatttccag ttgtaacata ggaaaataga tatttcctag 780
 atgatttctg agtttcttac tgcaaaagaa agttataaat tggatatacat gtgtctctgt 840
 aatagggata atattgatat atctgttgct acatatattaa gaatcattct atcttatgtt 900
 gtcttgaggc caagatttat cacgtttggc cagtgatttg aattgggtggg agaaggtagt 960
 tccattgttc atttgttagat ctttaagatt ttatccttga taactttaat agaattgtggc 1020
 tcagttctgg tccttcaagc ctgtatggtt tggattttca gtaggggaca gttgatgtgg 1080
 agtcaatctc tttggtacac aggaagcttt ataaaatttc attcacgaat ctcttatttt 1140
 gggaaagctgt tttgcatatg agaagaacac tgttgaaata aggaactaaa gctttatata 1200
 ttgatcaagt tgattctgaa agttttaatt ttaagtgttg taatgtttat ttattgttaa 1260
 ttgtacttta ttatgtattc aatagaaaat catgatttat taataaaagc ttaaatcttc 1320
 atctaaaaaa aaaaaaaaaa a 1341

<210> 57
 <211> 3834
 <212> DNA
 <213> Homo sapiens

<400> 57
 cctgagacag aggcagcagt gataccacc tgagagatcc tgtgtttgaa caactgcttc 60
 ccaaaacgga aagtatttca agcctaaacc tttgggtgaa aagaactctt gaagtcatga 120
 ttgcttcaca gtttctctca gctctcactt tgggtgctct cattaaagag agtggagcct 180
 ggtcttacaa cacctccacg gaagctatga cttatgatga ggcagtgct tattgtcagc 240
 aaaggtacac acactggtt gcaattcaaa acaaagaaga gattgagtac ctaactcca 300
 tattgagcta ttcaccaagt tattactgga ttggaatcag aaaagtcaac aatgtgtggg 360
 tctgggtagg aaccagaaa cctctgacag aagaagccaa gaactggct ccaggtgaac 420
 ccaacaatag gcaaaaagat gaggactgcg tggagatcta catcaagaga gaaaagatg 480
 ttggcatgtg gaatgatgag aggtgcagca agaagaagct tgccctatgc tacacagctg 540
 cctgacccaa tacactctgc agtgccacg gtgaatgtgt agagaccatc aataattaca 600
 cttgcaagtg tgaccctggc ttcagtggac tcaagtgtga gcaaattgtg aactgtacag 660
 ccctggaatc ccctgagcat ggaagcctgg tttgcagtca cccactggga aactcagct 720
 acaattcttc ctgctctatc agctgtgata ggggttacct gccaaagcag atggagacca 780
 tgcatgtgat gtcccttgga gaatggagtg ctccatttcc agcctgcaat gtggttgagt 840
 gtgatgctgt gacaaatcca gccaatgggt tcgtggaatg tttccaaaac cctggaagct 900
 tcccattgaa cacaacctgt acatttgact gtgaagaagg atttgaacta atgggagccc 960
 agagccttca gtgtacctca tctgggaatt gggacaacga gaagccaacg tgtaaaagctg 1020
 tgacatgcag ggcctgcgc cagcctcaga atggctctgt gagggtgcagc cattccctcg 1080
 ctggagagtt caccttcaaa tcatcttgca acttcacctg tgagggaaggc ttcattgttc 1140
 agggaccagc ccaggttgaa tgcaccactc aagggcagtg gacacagcaa atcccagttt 1200
 gtgaagcttt ccagtgtgca gccttgtcca accccgagcg aggtctacat aattgtcttc 1260
 ctagtgtctc tggcagtttc cgttatgggt ccagctgtga gttctcctgt gaggagggtt 1320
 ttgtgtgtaa gggatccaaa aggtccaat gtggccccc aggggagtg gacaacgaga 1380
 agccccatg tgaaagctgt agatgcgat ctgtccacca gccccgaag ggtttgggtg 1440
 ggtgtgctca ttcacctatt ggagaattca cctacaagtc ctcttggtgc ttcagctgtg 1500

aggaggggatt	tgaattatat	ggatcaactc	aacttgagtg	cacatctcag	ggacaatgga	1560
cagaagaggt	tccttcctgc	caagtggttaa	aatgttcaag	cctggcagtt	ccgggaaaga	1620
tcaacatgag	ctgcagtggt	gagcccggtg	ttggcactgt	gtgcaagttc	gcctgtcctg	1680
aaggatggga	gctcaatggg	tctgcagctc	ggacatgtgg	agccacagga	cactgggtctg	1740
gcctgctacc	tacctgtgaa	gctcccactg	agtccaacat	tcctttggta	gctggacttt	1800
ctgctgctgg	actctccctc	ctgacattag	caccattttct	cctctgggct	cggaatgct	1860
tacggaaagc	aaagaaattt	gttcctgcc	gcagctgcc	aagccttgaa	tcagacggaa	1920
gctaccaaaa	gcctctctac	atccttttaag	ttcaaaaaga	tcagaaaacg	gtgactctgg	1980
ggaactagag	ggatacactg	aagttaacag	agacagataa	ctctcctcgg	gtctctggcc	2040
cttcttgctc	actatgccag	atgcctttat	ggctgaaacc	gcaacaccca	tcaccacttc	2100
aatagatcaa	agtcacgag	gcaaggacgg	ccttcaactg	aaaagactca	gtgttccctt	2160
tcctactctc	aggatcaaga	aagtgttggt	taatgaagg	aaaggataatt	ttcttccaag	2220
caaaggtgaa	gagaccaaga	ctctgaaatc	tcagaattcc	ttttctaatt	ctcccttgct	2280
cgtctgtaaaa	tctttggcaga	gaaacacaa	attttgtggc	tttctttctt	ttgcccctca	2340
cagtggtttg	acagctgatt	acacagttgc	tgtcataaga	atgaataata	attatccaga	2400
gtttagagga	aaaaaatgac	taaaaatatt	ataacttaaa	aaaatgcacg	atgttgaatg	2460
cccacaggga	aatgcatgga	gggttggttaa	tggtgcaaat	cctactgaat	gctctgtgctg	2520
aggggttacta	tgcacaattt	aatcactttc	atccctatgg	gattcagttc	ttcttaaaaga	2580
gttcttaagg	atttgtat	tttacttgc	attgaatata	ttataatctt	ccatactctc	2640
tcattcaata	caagtgtggt	agggaacttaa	aaaacttgta	aatgctgtca	actatgat	2700
gtgtaaagtt	acttatttcta	gattaccccc	tcattgttta	ttacaacaa	atgtttacatc	2760
tgttttaaat	tattttcaaa	aagggaacct	attgtccctc	agcaaggcat	gatgttaacc	2820
agaataaagt	tctgagtggt	tttactacag	ttgttttttg	aaaacatggg	agaattggag	2880
agtaaaaaat	gaatggaagg	tttgtatat	gtcagatatt	ttttcagaaa	tatgtgggtt	2940
ccacgatgaa	aaacttccat	gaggccaaac	gttttgaaat	aataaaaaga	taaatgcaaa	3000
cacacacagg	tataatttta	tgaatgtctt	tggttgaaaa	gaatacacaa	agatggatgt	3060
gcttttgact	cctacaaaaga	tgttgtgcag	atgtgatatt	taaacataac	ctctgtatat	3120
tttggaagat	tttaaatcca	caatgagaac	tcaccatgta	aaagagtcac	ctggtagatt	3180
tttaacgaat	gaagatgtct	aatagtattt	ccctatttgt	tttcttctgt	atgttagggg	3240
gctctggaag	agaggaaatgc	ctgtgtgagc	aagcatttat	gtttatttgt	aagcagattt	3300
aacaattcca	aaggaaatctc	cagttttcag	ttgatcactg	gcaatgaaaa	attctcagtc	3360
agtaattgac	aaagctgctc	tagccttgag	gagtgtaga	atcaaaaact	tcctacactt	3420
ccattaaact	agcatgtggt	gaaaaaaaaa	gtttcagaga	agttctggct	gaacactggc	3480
aacgacaaag	ccaacagtc	aaacagagat	gtgataagga	tcagaaacgc	agaggttctt	3540
ttaaaggggc	agaaaaactc	tgggaataaa	gagagaacaa	ctactgtgat	caggtcatgt	3600
atggaataca	gtgttatttt	ctttgaaatt	gtttaagtgt	tgtaaatatt	tatgttaaat	3660
gcattagaaa	ttagctgtgt	gaaataccag	tggtggttgt	gtttgagttt	tatgagaaat	3720
tttaaatatt	aacttaaat	attttataat	ttttaagta	tatatattat	taagcttatg	3780
tcagacctat	ttgacataac	actataaagg	ttgacaataa	atgtgcttat	gttt	3834

<210> 58
 <211> 1679
 <212> DNA
 <213> Homo sapiens

<400> 58						
gtttgttggtg	tcgggcagca	ggtagcaaa	tgacgccgag	ggcctgagtg	ctccagtagc	60
caccgcactc	ggagaaccag	cggttaccat	ggaggggagc	agtatataca	cttcagataa	120
ctacaccgag	gaaatgggct	caggggagta	tgactccatg	aaggaaacct	gtttccgtga	180
agaaaatgct	aatttcaata	aaatcttctc	gccaccatc	tactccatca	ttcttctaac	240
tggcattgtg	ggcaatggat	tggtcatcct	ggatcatggg	taccagaaga	aactgagaag	300
catgacggag	aagtcacagg	tgcaactgtc	agtgccgac	ctcctctttg	tcatcacgct	360
tcctctcttg	gcagttgatg	ccgttgcaaa	ctggtagctt	gggaacttcc	tatgcaaggc	420
agtcacatgt	atctacacag	tcacacttca	cagcagtgct	ctcactcctg	cttcactcga	480
ctctggaacc	tacctggcca	tcgtccacgc	caccaacagt	cagagggcca	ggaagctggt	540
ggctgaaaa	gtgggtctatg	ttggcgctct	gatccctgcc	ctcctgctga	ctattcccca	600
cttcatcttt	gccaacgtca	gtgagcgaga	tgacagatat	atctgtgacc	gtctctaccc	660
caatgacttg	tggtgtggtg	tggtccaagt	tcagcacatc	atggttggtc	ttatcctgcc	720
tggttatgtc	atcctgtcct	gctattgcat	tatcatctcc	aagctgtcac	actccaaggg	780
ccaccagaag	cgcgaaggcc	tcagaccac	agtcactcct	atcctgtgctt	ttctgcctcg	840
ttggctgctc	tactacattg	ggatcagcat	cgactccttc	atcctcctgg	aaatcatcaa	900

gcaagggtgt	gagtttgaga	acactgtgca	caagtggatt	tccatcacccg	aggccctagc	960
tttcttccac	tggtgtctga	accccatcct	ctatgctttc	cttggagcca	aattttaaacc	1020
ctctgtcccag	cacgcactca	cctctgtgag	cagagggtcc	agcctcaaga	tctcttccaa	1080
aggaagcgga	ggtggacatt	catctgtttc	cactgagtct	gagtcctcaa	gttttctactc	1140
cagctaaccac	agatgtataa	gacttttttt	tatacgataa	ataacttttt	ttaagtttac	1200
acatttttca	gataataaa	actgaccaat	attgtacagt	ttttattgct	tgttggattt	1260
ttgtctttgt	tttctttagt	ttttgtgaag	tttaattgac	ttattttatat	aaattttttt	1320
tgtttcatat	tgatgtgtgt	ctaggcagga	cctgtggcca	agttcttagt	tgctgtatgt	1380
ctcgtggtag	gactgtagaa	aagggaaactg	aacattccag	agcgtgtagt	gaatcacgta	1440
aagctagaaa	tgatccccag	ctgtttatgc	atagataatc	tctccattcc	ctgggaacgt	1500
ttttctgtgt	cttaagacgt	gattttgtctg	tagaagatgg	cacttataac	caaagcccaa	1560
agtgtgtatag	aaatgctgggt	ttttcagttt	tcaggagtggt	gttgatttca	gcacctacag	1620
tgtacagctc	tgtattaagt	tgtaataaaa	agtacatggt	aaacttactt	agtgttatg	1679

<210> 59

<211> 2006

<212> DNA

<213> Homo sapiens

<400> 59

cttcccacga	gcaaagacca	cgactggaga	gccgagccgg	aggcagctgg	gaaacatgaa	60
gagcgtcttg	ctgctgacca	cgctcctcgt	gccctgcacac	ctgggtggccg	cctggagcaa	120
taattatcgt	gtggactgcc	ctcaacactg	tgacagcagt	gagtgcaaaa	gcagcccgcg	180
ctgcaagagg	cagctgctcg	acgactgtgg	ctgctgccga	gtgtgcgctg	cagggcgggg	240
agaaacttgc	taccgcacag	tctcaggcat	ggatggcatg	aagtgtggcc	cggggctgag	300
gtgtcagcgt	tctaattggg	aggatccttt	tggtgaagag	tttggatatc	gcaaagactg	360
tccctacgct	accttcggga	tggattgcag	agagacctgc	aactgccagt	caggcatctg	420
tgacaggggg	acgggaaaat	gcctgaaatt	ccccttcttc	caatattcag	taaccaagtc	480
ttccaacaga	tttgtttctc	tcacggagca	tgacatggca	tctggagatg	gcaatatgtt	540
gagagaagaa	gttgtgaaa	agaatgctgc	cggtctctcc	gtaatgagga	aatggttaaa	600
tccacgctga	tcccggctgt	gatttctgag	agaaggctct	attttctgta	ttgttcaaca	660
cacagccaac	attttaggaa	ctttctagat	atagcataag	tacatgtaat	tttgaagat	720
ccaaatttgt	atgcatgggt	gatccagaaa	acaaaaagta	ggatacttac	aatccataac	780
atccatgatg	ctgaacactt	gtatgtgttt	gttaaatatt	cgaatgcagt	tagatttgtt	840
aaatgtgtgt	ctatagtaac	actgaagaac	taaaaatgca	atttaggtaa	tcttcatagg	900
agacaggtca	accaaagagg	gagctaggca	aagctgaaga	ccgcagtgag	tcaaattagt	960
tctttgactt	tgatgtacat	taatgtttgg	atatggaatg	aagacttaag	agcaggagaa	1020
gatggggagg	gggtgggagt	gggaaataaa	atattttagcc	cttccttggt	aggtagcttc	1080
tctagaattt	aatgtgtgct	tttttttttt	tttggctttg	ggaaaagtca	aaataaaaaca	1140
accagaaaac	ccctgaagga	agtaagatgt	ttgaagctta	tggaaatttg	agtaacaaac	1200
agctttgaac	tgagagcaat	ttcaaaaggc	tgctgatgta	gttcccgggt	tacctgtatc	1260
tgaaaggacg	ttctggggca	taggaaacac	atacacttcc	ataaatagct	ttaacgtatg	1320
ccacctcaga	gataaatcta	agaagtattt	tacccactgg	tggtttgtgt	gtgtatgaag	1380
gtaaatatatt	atatattttt	ataaataaat	gtgttagtgc	aagtcattct	ccctacccat	1440
atttatcatc	ctcttgagga	aagaaatcta	gtattatttg	ttgaaaatgg	ttagaataaaa	1500
aacctatgac	tctataaggt	tttcaaacat	ctgaggcatg	ataaatttat	tatccataat	1560
tataggagtc	actctggatt	tcaaaaaaatg	tcaaaaaaatg	agcaacagag	ggaccttatt	1620
taaacataag	tgctgtgact	tcggtgaatt	ttcaatttaa	ggatgaaaaa	taagttttta	1680
ggaggtttgt	aaaagaagaa	tcaattttca	gcagaaaaaca	tgtaactttt	aaaatatagg	1740
tggaaattagg	agtaattttg	aaagaattctt	agcacaaaaca	ggactgttgt	actagatggt	1800
cttaggaatt	atctcagaag	tatttttttt	gaagtgaaga	acttatttaa	gaattatttc	1860
agttattacc	tgtattttat	tcttgaagtt	ggccaacaga	gttgtgaatt	tgtgtgggaag	1920
gcctttgaat	gtaaaagctgc	ataagctgtt	aggttttgtt	ttaaaaggac	atgtttattta	1980
ttgttcaata	aaaaagaaca	agatac				2006

<210> 60

<211> 5510

<212> DNA

<213> Homo sapiens

<400> 60

agccggcgct	ggtggctccg	tgcgtccgag	cgctccgctc	cgccgtccgc	catggccaag	60
cgctccagg	gccccggcg	ccgctgcctg	ttggcgctcg	tgctgtctct	cgccctgggg	120
acgctggccg	tgggtggccc	gaagccgggc	gcagggtgtc	cgagccgctg	cctgtgcttc	180
cgaccaccg	tgcgctgcat	gcactgtctg	ctggaggccg	tgcccgcgct	ggcgccgcag	240
acctccatcc	tagatctctg	ctttaacaga	atcagagaga	tccaacctgg	ggcattccagg	300
cggtcgagga	acttgaacac	attgctcttc	aataataatc	agatcaagag	gatacctagt	360
ggagcatttg	aagactttgga	aaatttaaaa	tatctctatc	tgtacaagaa	tgagatccag	420
tcaattgaca	ggcaagcatt	taaggagact	gcctctctag	agcaactata	cctgcaactt	480
aatcagatag	aaacttttga	ccagacttcg	ttccagcatc	tcccagctat	cgagaggcta	540
tttttgcata	acaaccggat	tacacattta	gttcaggga	catttaatca	cttggaaact	600
atgaagagat	tgcgacttga	ctcaaacaca	cttcactcg	actgtgaaat	cctgtgggtg	660
gcggatttgc	tgaaaaacct	cgcgaggtcg	gggaacgcgc	aggcagcgcc	catctgtgaa	720
tatcccgac	gcattccagg	acgctcagtg	gcaaccatca	ccccggaaga	gctgaactgt	780
gaaaggcccc	ggatcacctc	cgagccccag	gacgcagatg	tgacctcggg	gaacaccgtg	840
tacttccact	cgagagccga	aggcaacccc	aagcctgaga	tcatctggct	gcgaaacaat	900
aatgagctga	gcattgaagac	agattccccg	ctaaacttgc	tggacgatgt	gacctgtagt	960
atccagaaca	cacaggagac	agaccagggt	atctaccagt	gcattggcaaa	gaacgtggcc	1020
ggagaggtga	agacgcagaa	ggtgaccttc	aggtacttcg	ggtctccagc	tgaccacct	1080
tttgtaatcc	agccacagaa	tacagaggtg	ctgggtgggg	agagcgctac	gctggagtcg	1140
agcgccacag	gccacccccc	gcgcgggatc	tcttgagcga	gaggtgacgc	cacacccttg	1200
ccagttgacc	cgcggtgtaa	catcacgcct	tctggcgggc	ttacataca	gaacgtcgta	1260
cagggggaca	gcggagagta	tgcgtgctct	gcgaccaaca	acattgacag	cgtccatgcc	1320
accgctttca	tcatctgcca	ggctcttctc	cagttcaactg	tgacgcctca	ggacagagtc	1380
gttattgagg	gccagaccgt	ggatttccag	tgtgaagcca	agggcaaccc	gccgcccgct	1440
atcgctgga	ccaaggagg	gagccagctc	tccgtggacc	ggcggaacct	ggtcctgtca	1500
tcgggaacac	ttagaatctc	ttggtgtgcc	ctccacgacc	aggccagcta	cgaaatgccag	1560
gctgtcaaca	tcatcggtc	ccagaaggtc	gtggcccacc	tgaactgtga	gccagagtc	1620
accccggtgt	ttgccagcat	tccacgcgac	acaaacagtg	aggtggggcg	caatgtgcag	1680
ctcccgtgca	gctcccagg	cgagcccgag	ccagccatca	cctggaaaca	ggatgggggt	1740
caggtgacag	aaagtggaaa	atttcaatc	agccctgaag	gattcttgac	catcaatgac	1800
gtttggccctg	cagacgcagg	tcgctatgag	tgtgtggccc	ggaacacctg	ttggctcgcc	1860
tcggtgagca	tggtgctcag	tgtgaacgtt	cctgacgtca	gtcgaaatgg	agatccggtt	1920
gtagctacct	ccatcgtgga	agcgatttgc	actgttgaca	gagctataaa	ctcaacccca	1980
acacatttgt	ttgacagccg	tctcgtttct	ccaaatgatt	tgtcggcctt	gtctccggat	2040
ccgagggatc	cttacacagt	tgaacaggca	cgggcgggag	aaatctttga	acggacattg	2100
cagctcattc	aggagcatgt	acagcatggc	ttgatggctg	acctcaacgg	aacaagttac	2160
cactacaacg	acttgggtgc	tccacgatac	ctgaacctca	tcgcaaacct	gtcgggtctg	2220
accgccccac	ggcgctgtaa	caactgctcg	gacatgtgct	tccaccagaa	gtaccggagc	2280
cagcagcgca	ctgtacaaca	cctgcgacac	cccatgtggg	gcgcctcgct	gaccgccttc	2340
gagcgcttgc	tgaatccgtg	gtacgagaat	ggcttcaaca	cccctcgggg	catcaacccc	2400
caccgactgt	acaacgggca	cgcccttccc	atgccgcgcc	tggtgtccac	cacctgtgat	2460
gggacggaga	ccgtcacacc	cgacgagcag	ttcaccacaa	tgctgatgca	gtggggccag	2520
ttcctggacc	acgacctcga	ctccacgggt	gtggccctga	gccaggcacg	cttctccgac	2580
ggacagcact	cgagcaacgt	gtgcagcaac	gacccccctc	gcttctctgt	catgatcccc	2640
cccaatgact	cccggggcag	gagcgggggc	cgctgcatgt	tcttctgtgc	ctccagccct	2700
gtgtgcggca	gcgcgatgac	ttcgtgtctc	atgaactccg	tgtaccgcgc	ggagcagatc	2760
aaccagctca	cctcctacat	cgacgcatec	aacgtgtacg	ggagcacgga	gcgataggcc	2820
cgacgatccc	gcgacctggc	cagccaccgc	ggcctgtctg	ggcagggcac	gctgcagcgg	2880
tccgggaaag	cgctgctccc	cttcgcaccc	gggcccgcga	cggagatgat	gcgggacgag	2940
aacgcagagc	ccatccccctg	cttcttggcc	ggggaccacc	gcgcgaacga	cgagctgggc	3000
ctgaccagca	tgcacacgct	gtggttccgc	gagcacaacc	gcattgccac	ggagctgctc	3060
aagctgaacc	gcgactggga	cgccgacac	atctactatg	agaccaggaa	gatcgtgggt	3120
cgggagatcc	agcacatcac	ctaccagcac	tggtctccga	agatcctggg	ggaggtgggc	3180
atgaggagcg	tgggagagta	ccacggctac	gaccccgcca	tcaatgctgg	catcttcaac	3240
gccttcgccca	ccgcggcctc	caggttttgg	cacacgcttg	tcaaccactt	gctttaccgg	3300
ctggacagga	acttccagcc	catgtcacaa	gatcacctcc	cccttcacaa	agctttcttc	3360
tctcccttcc	ggattgtgaa	tgaggcgccg	atcgatccgc	ttctcagggg	gctgttcggg	3420
gtggcggggg	aaatgcgctg	ggcctgcgag	ctgctgaaca	cggaagctcc	ggagcgctcg	3480
ttctccatgg	cacacacggt	ggctctggac	ctggcgccca	tcaacatcca	gcggggccgg	3540
gaccacggga	tcccacctta	ccacgactac	agggtctact	gcaatctatc	ggcggcacac	3600

10021560.120601

acgttccgagg	acctgaaaaa	tgagattaaa	aaccctgaga	tccgggagaa	actgaaaagg	3660
ttgtatggct	cgacactcaa	catcgacctg	tttccggcgc	tctgttggtga	ggacctggtg	3720
cctggcagcc	ggctggggccc	caccctgatg	tgtcttctca	gcacacagtt	caagcgctcg	3780
cgagatgggg	acaggtttgtg	gtatgagaac	cctgggggtg	tctccccggc	ccagctgact	3840
cagatcaagc	agacgtcgct	ggccaggatc	ctatgcgaca	acgcgggaaa	catcacccgg	3900
gtgcagagcg	acgtgttcag	gggtggcggag	ttccctcacg	gctacggcag	ctgtgacgag	3960
atccccaggg	tggacctccg	gggtgtggcag	gactgctgtg	aagactgtag	gaccaggggg	4020
cagttcaatt	ccttttcccta	tcatttccga	ggcagacggt	ctcttgagtt	cagctaccag	4080
gaggacaagc	cgaccaagaa	aacaagacca	cggaaaatac	ccagtgttgg	gagacagggg	4140
gaacatctca	gcaacagcag	ctcagccttc	agcacacgct	cagatgcac	tgggacaaat	4200
gacttcagag	agttttgtct	ggaaaatcgag	aagaccatca	cagacctcag	aacacagata	4260
aagaaaacttg	aatcacggct	cagtaccaca	gagtgcgtgg	atgccggggg	cgaatctcac	4320
gccaacaaca	ccaagtggaa	aaaagatgca	tgcaaccatt	gtgaatgcaa	agacggggcag	4380
gtcacctgct	tctgtggaagc	ttgccccctt	gccacctgtg	ctgtccccgt	gaacatccca	4440
ggggcctgct	gtccagctctg	cttacagaag	agggcggagg	aaaagcccta	ggctcctggg	4500
aggtctctca	gagtttgtct	gctgtgccat	cgtgagatcg	gggtggccgat	ggcagggagc	4560
tgcggactgc	agaccaggaa	acaccagaa	ctcgtgacat	ttcatgacaa	cgctccagctg	4620
gtgctgttac	agaaaggcag	gcaggaggct	tcacaaccga	gcactctgcg	agaaggaggc	4680
acagcagggt	cctgaaggga	agcaggcagg	agtcttagct	tcactgtaga	cttctcaggt	4740
ttttatttaa	ttcttttaaa	atgaaaaatt	gggtgctacta	ttaaaattgca	cagttgaatc	4800
atttaggcgc	ctaaattggt	tttgcctccc	aacaccattt	ctttttaaat	aaagcaggat	4860
acctctatat	ctcagctctg	ctttgttcag	atggcaggag	cgggcagacc	tgctaccgcg	4920
aggtgggggt	agtctcggag	ctgccagagg	ggctcaccca	aatcgggggt	ccatcacaa	4980
ctatgttttaa	agcaaaaatt	gggtgtttggc	aaacgggaaca	gaacctttga	tggagcggtt	5040
cacagggaca	ctgtctgggg	gtgcagtgca	agcccccggc	ctcttccctg	ggaaacctctg	5100
aactcctcct	tcctctgggg	tctctgtaac	atttcaccac	acgtcagcat	ctaataccaa	5160
gacaaaacatt	ccgcgtctctc	gaagcagctg	tatagctctg	gactctccgt	gtgtcagctc	5220
cttccacacc	tgattagaac	attcataagc	cacatttaga	aacagatttg	ctttcagctg	5280
tcacttgcac	acatactgcc	tagttgtgaa	ccaaaatgtga	aaaaaccttc	tctatcccat	5340
tgtgtatctg	ataccctgcc	agggccaagg	gtgtgtgttg	acaacggcgc	tcccagcgcg	5400
ccctggttgc	gtccacgtcc	tgaacaagag	ccgcttccgg	atggctcttc	ccaagggagg	5460
aggagctcaa	gtgtcgggaa	ctgtctaaat	tcaggttgtg	tgagtgcgtt		5510

<210> 61

<211> 3864

<212> DNA

<213> Homo sapiens

<400> 61

aattcgagga	tccgggtacc	atggcacaga	gcgacagaga	catttattgt	tatttgtttt	60
ttggtggcaa	aaagggaaaa	tggcgaacga	ctcccctgca	aaaagtctgg	tggacatcga	120
cctctcctcc	ctgcggggtc	ctgctgggat	ttttgagctg	gtggaagtgg	tggaaaatgg	180
cacctatgga	caagtctata	agggtcgaca	tgttaaaacg	ggctcagttg	cagccatcaa	240
agttatggat	gtcactgagg	atgaagagga	agaaatcaaa	ctggagataa	atatgctaaa	300
gaaatactct	catcacagaa	acattgcaac	atattatggt	gctttcatca	aaaagagccc	360
tcaggacat	gatgaccaac	ctcggcttgt	tatggagtcc	tgtggggctg	ggctccattc	420
agaccttgtg	aagaacacca	aagggaacac	actcaaagaa	gactggatcg	cttacatctc	480
cagagaaatc	ctgaggggac	tggcacatct	tcacattcat	catgtgattc	accgggatat	540
caaggggccag	aatgtgtttg	tgactgagaa	tgcagaggtg	aaacttgttg	actttgtgtg	600
gagtgtctag	ctggacagga	ctgtggggcg	gagaaatacg	ttcataggca	ctccctactg	660
gatggctcct	gaggtcatcg	cctgtgatga	gaaccagatg	gccacctatg	attacagaag	720
tgacttttgg	tctttggcca	ttacagccat	tgagatggca	gaaggtgtctc	ccccctctg	780
gtcatctgac	ccaatgagag	cactgtttct	cattcccaga	aacctctctc	ccgggctgaa	840
tgcaaaaaaa	ttggtcgaaga	agtttttttag	ttttatagaa	gggtgcctcg	tgaagaattta	900
catgcagcgg	ccctctacag	agcagctttt	gaaacatcct	tttataaggg	atcagccaaa	960
tgaaggcga	gttagaatcc	agcttaagga	tcatatagat	cgtaccagga	agaagagagg	1020
cgagaagaat	gaaactgagt	atgagtacag	tgggagtgag	gaagaaaggg	aggaagtgcc	1080
tgaacaggaa	ggagagccaa	gttccattgt	gaacgtgcct	ggtgagctca	ctcttcgccc	1140
agatttctcg	agactgcagc	aggagaacaa	ggaacgttcc	gaggctcttc	ggagacaaca	1200
gttactacag	gagcaacagc	tcggggagca	ggaagaatat	aaaaggcaac	tgtcggcaga	1260
gagacagaag	cggattgagc	agcagaaaag	acagaggcga	cggctagaag	agcaacaaag	1320

gagagagcgg	gaggctagaa	ggcagcagga	acgtgaacag	cgaaggagag	aacaagaaga	1380
aaagaggcgt	ctagaggagt	tggagagaag	gcgcaagaa	gaagaggaga	ggagacgggc	1440
agaagaagaa	aagaggagag	ttgaaagaga	acaggagtat	atcagggcag	agctagaaga	1500
ggagcagcgg	cacttgggaag	tccttcagca	gcagctgtct	caggagaccg	ccatgttact	1560
gcatgaccat	aggagcccg	acccgcagca	ctcgcagcag	cgcaccacac	cgcagcagga	1620
aaggagcaag	ccaagcttcc	atgctcccga	gccccaaagcc	cactacgcag	ctgctgaccg	1680
agcgcgagag	gttctctgtga	gaacaacatc	tcgctccctc	gttctgtccc	gtcgagattc	1740
ccactgcag	ggcagtgggc	agcgaatag	ccaggcagga	cagagaaact	ccactcagtat	1800
tgagcccagg	cttctgtggg	agagagtggg	gaagctgggt	cccagacctg	gcagtggcag	1860
ctcctcaggg	tccagcaact	caggatccca	gcccgggtct	cacctgggtg	ctcagagtgg	1920
ctccggggaa	cgcttcagag	tgagatcatc	atccaaagtct	gaaggctctc	catctcagcg	1980
cctggaaaat	gcagtgaaaa	aacctgaaga	taaaaaggaa	gttttcagac	ccctcaagcc	2040
tgctggcgaa	gtggatctga	ccgcactggc	caaagagctt	cgagcagtg	aagatgtacg	2100
gccacctcac	aaggtaacgg	actactctc	atccagttag	gagtcgggga	cgacggatga	2160
ggaggacgac	gatgtggagc	aggaaggggc	tgacgagtc	acctcaggac	cagaggacac	2220
cagagcagag	tcactctctga	atttgagcaa	tggtgaaacg	gaatctgtga	aaacctatga	2280
tgtccatgat	gatgtagaaa	gtgagccggc	catgacccca	tccaaggatg	gcactctaat	2340
cgctccgccag	actcagtcgg	ctagtagcac	actccagaaa	cacaaatctt	cctcctcctt	2400
tacacctttt	atagacccca	gattactaca	gatttctcca	tctagcggaa	caacagtgac	2460
atctgtgggt	ggattttcct	gtgatgggat	gagaccagaa	gccataaggc	aagatcctac	2520
ccggaaggcg	tcagtgggtca	atgtgaaatcc	taccaacact	aggccacaga	gtgacacccc	2580
ggagattcgt	aaatacaaga	agaggtttaa	ctctgagatt	ctgtgtgctg	ccttatgggg	2640
agtgaatttg	ctagtgggta	cagagagtgg	cctgatgtcg	ctggacagaa	gtggccaaagg	2700
gaaggtctat	cctcttatca	accgaagacg	atttcaacaa	atggcagctac	ttgagggtct	2760
gaatgtcttg	gtgacaatat	ctggcaaaaa	ggataagtta	cggtgtctact	atgtgtcttg	2820
gttaagaaat	aaaatacttc	acaatgatcc	agaagttag	aagaagcagg	gatggacaa	2880
cgtaggggat	ttcgaaggat	gtgtacatta	taaagttagta	aaatatgaaa	gaatcaaat	2940
tctgttgatt	gctttgaaga	gttctgtgga	agtcctatgc	tgggcaccaa	agccatatca	3000
caaatttatg	gccttttaagt	catttggaga	attgtgtacat	aagccattac	tggtggatct	3060
cactgttgag	gaaggccaga	ggttgaagt	gatctatgga	tctgtgtctg	gattccatgc	3120
tgttgatgtg	gattcaggat	cagtcctatga	catttatcta	ccaacacatg	taagaaagaa	3180
cccacactct	atgatccagt	gtagatcaaa	accccatgca	atcatcatcc	tccccaatac	3240
agatggaatg	gagcttctgg	tgtgtctatga	agatgagggg	gtttatgtaa	acacatattg	3300
aaggatcacc	aaggatgtag	ttctacatgt	gggagagatg	cctacatcag	tagcatatat	3360
tcgatccaat	cagacaatgg	gctggggaga	gaaggccata	gagatccgat	ctgtggaac	3420
tggtcacttg	gatgtgtgtg	tcatgaccaa	aaaggctcaa	agactaaaa	tctgtgtgta	3480
acgcaatgac	aagggtgtct	ttgcctctgt	tcggctctgt	ggcagcagtc	aggtttatct	3540
catgacetta	ggcaggactt	ctcttctgag	ctggtagaag	cagtgtagtc	cagggattac	3600
tggcctccag	agtcttcaag	atcctgagaa	cttggaattc	cttgtaactg	gagctcggag	3660
ctgcaccgag	ggcaaccagg	acagctgtgt	gtgcagacct	catgtgtgtg	gttctctccc	3720
ctccttctct	ttcctcttat	ataccagttt	atccccatto	tttttttttt	tcttactcca	3780
aaataaatca	aggctgcaat	gcagctgtgt	ctgttcagat	tccaaaaaaa	aaaaaaaaac	3840
atggtaccgg	gatctctgaa	ttcc				3864

<210> 62

<211> 2494

<212> DNA

<213> Homo sapiens

<400> 62

cacgaggcag	ggggcatttt	acctccaggt	tggccctgtct	caggaccagg	aggaaacacc	60
tcagcccg	gacctctcc	cacaggggga	aaaggaaagc	aggaggacca	cagaagcttt	120
ggcaccgag	atccccgag	tcttcaaccg	cggagattcc	ggctgaagga	gctgtccagc	180
gactacaccg	ctaagcgcag	ggagcccaag	cctccgcacc	ggattccgga	gcacaagctc	240
caccgcgcat	gcgcacaagc	cccagaccca	ggctcaggag	gactgagaat	ttctctgacg	300
cagtgacacca	ttgggaagctc	tgaagtcttc	ataattctctg	ggctccagaa	agaagaaaa	360
gcggcgctgg	agagacgaag	acttcatgtg	ctgaaagctc	tgaagaaagc	aaggattgag	420
gctgatgagg	cccagttgt	tgctgtgtctg	ggctcaggcg	gaggactcgc	ggctcacatt	480
ctgtgccttg	gggtcctgag	tgagatgaaa	gaacaggggc	tggtggatgc	cgtcacgtac	540
ctcgaggggg	tctctggatc	cacttgggca	atatcttctc	tctacaccaa	tgtgtgtgac	600
atggaagctc	tcgaggctga	cctgaaacat	cgaatttacc	gacaggagtgc	ggacttggtc	660

aagagcctac	agaaaaccat	ccaagcagcg	aggtctgaga	attactctct	gaccgacttc	720
tgggcctaca	tgggtatctc	taagcaaac	agagaactgc	cggagtctca	tttgtccaat	780
atgaagaagc	cctggaaga	agggaacta	ccttacccaa	tatttgcagc	cattgacaat	840
gacctgcaac	cttctctggc	ggaggcaaga	gcaccagaga	cctgggttca	gttcacacct	900
caccacgctg	gttctctctg	actgggggcc	tttgtttcca	taaccacctt	cggaaagcaa	960
ttcaagaagg	gaagactggt	cagaactcac	cctgagagag	acctgacttt	cctgagaggt	1020
ttatggggaa	gtgctcttgg	taacactgaa	gtcattaggg	aatacatttt	tgaccagtta	1080
aggaatctga	ccttgaaaagg	tttatggaga	agggctgttg	ctaagtctaa	aagcattgga	1140
caccttattt	ttgcccagatt	actgaggctg	caagaaagtt	cacaaggggga	acatcctccc	1200
ccagaagatg	aaggcggtga	gcctgaacac	acctggctga	ctgagatgct	cgagaattgg	1260
accaggacct	ccctggaaaa	gcaggagcag	cccatgagg	accccgaag	gaagggctca	1320
ctcagtaact	tgatggattt	tgtgaagaaa	acaggcattt	gcgcttcaaa	gtgggaatgg	1380
gggaccactc	acaacttctt	gtacaaacac	ggtggcatcc	gggacaagat	aatgagcagc	1440
cggaaagcac	ccctactggt	ggatgctggt	ttagccatca	acactccctt	cccactcgtg	1500
ctgccccgca	cgcggggagg	tcacctcatc	ctctccttcg	acttcagtgc	cggagatcct	1560
ttcgagacca	ctcgggctac	catgacttac	tgcgcgcgcg	acaagatccc	cttctcccaa	1620
gtagaagagg	ctgagctgga	tttgtgtgcc	aaggcccccg	ccagctgcta	catcctgaaa	1680
ggagaaactg	gaccagtgtg	gatacatttt	ccccgtgtca	acatagatgc	ctgtggagggt	1740
gatatttgagg	catgagtgga	cacatacgac	acattcaagc	ttgctgacac	ctcacactcta	1800
gatgtggtgg	tgctactctt	ggcatttagcc	aagaagaatg	tcagggaaaa	caagaagaag	1860
atccttagag	agttgatgaa	cgtggccggg	ctctactacc	cgaaggatag	tgcccgaagt	1920
tgctgcttgg	catagtagag	cctcagcttc	cagggcactg	tgggcctgtt	ggctctactag	1980
ggccctgaag	tcacactggc	cttctctgtt	ttcactccct	tcagccacac	gctctactgg	2040
cttgagtcca	ccttggctgt	cctaacacgg	ccaatcacca	gtgaccagct	agactgtgat	2100
tttgatagcg	tcattcagtg	gaaggtgtcc	aaggagctga	aggtggtgaa	atttgtctctg	2160
cagggtccctc	gggagatcct	ggagctggag	catgagtgtc	tgacaatcag	aagcatcatg	2220
tcacatgtcc	agatggccac	aatgaatgtg	atagttcaga	ccaatgcctt	ccactgtctc	2280
tttatgactg	cacttctagc	cagtactctc	gcacaagtta	gctctgtaga	agtaagaact	2340
tggtgcttaa	tcatgggtca	tctctccaca	gccaagtggg	gctctgagaa	tacaacaagt	2400
gctcaataaa	tgcttgcgtg	ttgactgtag	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	2460
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaa			2494

<210> 63
 <211> 2415
 <212> DNA
 <213> Homo sapiens

<400> 63	
ggggaggggcg	cgggaggcg
gtccccggcg	accctactcc
ccggcgcgct	ccccgaccag
tccccagctg	cattccccga
ggctgccgca	ctggctggga
cgagcttgga	gcagtccttc
ccagccatgc	aatgttcctg
cagtcacgcg	ccatccgcac
gaggccgggg	tgcccgagcg
cgcaagaccc	acatcctcat
ctcttcaacc	agcaacttga
acgctcatcc	cccgtctcac
gccagccgcg	acctcctgcg
atcaagccgc	cgcgcgtcaa
gtcctctgct	cccggcctgt
gggacactgt	tgcgcaactg
gagcgcagcc	acgtggccat
ctggttggaag	accgcgatt
attctggctt	cgcgcagcga
ggcaccggga	ggaaccccta
ttctccaact	ccgtgtccac
ttgtgtgcgt	acgaggaact
ttctggggca	tcccgtctga
aggatgccgc	cgcggtctgt
agacccgagg	atggagccgg
gtagctgggt	tcacttcggt
ggcgcccttt	cgacctggag
ctgccaactg	ggcctggaga
cttgacctca	ccccctggag
gaaggccctc	ctcctccttg
cttcaccgcc	aagtccttcc
actgtgcgag	gagagcccca
cctggccacc	acgcgcagcg
cgtctctac	ctgtttgagc
ccagggcaag	agcccgcccg
gacctctac	gactgcgacc
ccacaccacc	gacaggatct
gtgcgacctc	ccggggccag
cgggctactc	aaacctgacc
cgcgtgcccg	aggtgaacga
gtcatccagc	tggtccgaga
gaccttgccg	ggctctggcg
tgaccacggt	gtgcgaggac
ggctcaaggg	agactcaagg
cctatgaaga	agaccagaga
gcccgtctga	tccagaacaa
ccaccgcggg	tgcaagtctc
gtggttgaaa	gaagactttc
ctggccacag	ctggccacag
tggttgactcc	tggttgactcc
atgaaggtgc	atgaaggtgc
catgtccatc	catgtccatc
cgggctggca	cgggctggca
caacctctcc	caacctctcc
cgtgggccag	cgtgggccag
cgctcagaac	cgctcagaac
catgctaggc	catgctaggc
ggcagactac	ggcagactac
ggccagccgg	ggccagccgg
cctggaggag	cctggaggag
ggcgtgccgc	ggcgtgccgc
cctgcgcgcc	cctgcgcgcc
cccccgccgc	cccccgccgc
ctcttggtac	ctcttggtac
gtgcgaggac	gtgcgaggac
caagtaactg	caagtaactg
gatctacggg	gatctacggg
cacgcggggc	cacgcggggc

gacccacc	tgggcaagca	caaatacggc	accgtgcgaa	actcggcggc	cacggccgag	1440
aagtggcgct	tccgcctctc	ctacgacatc	gtggcctttg	ccagaaacgc	ctgccagcag	1500
gtgctggccc	agctgggcta	caagatcgcc	gcctcggagg	aggagctgaa	gaaccctctg	1560
gtcagcctgg	tgaggaggcg	ggacttccgc	cccttctcgt	gacccggggcg	gtgcgggttg	1620
gggcggggag	cgcaagggtg	cggttttgat	aaaatggacc	gtttttaact	gttgcttat	1680
taaccctctc	ctctccacc	tcactctcgt	gtccttctcg	ccccagctc	acccactcc	1740
cttttgcccc	ttttttgtct	ctgaaatttg	cactacgtct	tggacgggaa	tcactggggc	1800
agaggcgccc	tgaagtaggg	tcccgcccc	cccccccat	tcagacacat	ggatgttggg	1860
tctctgtgcg	gacggtgaca	atgtttacaa	gcaccacatt	tacacatcca	cacacgcaca	1920
cgggcactcg	cgaggcgact	tctcaagctt	ttgaatgggt	gagtggtcgg	gtatctagtt	1980
tttgactgtg	cttactattc	aaggtaaagag	gatacaaaac	agaggaccac	ttgtctctaa	2040
tttatgaatg	gtgtccatcc	tttccccatc	cctgcctcct	gccccgacg	ccatttccc	2100
cccttagagc	agcgaaactg	ccccctcctg	cccgcccttg	cctgtcggtg	aggcaggttt	2160
ttactgtgag	gtgaacgtgg	acctgtttct	gtttccagtc	tgtggtgatg	ctgtctgtct	2220
gtctgagtct	cgtagccgccc	cctggaccag	tgatgactga	tgaatcttat	gagcttctga	2280
ttgatctcgg	ggtccatctg	tgattttctt	ttgtgccaaa	aagaaaacaaa	aagagtggat	2340
cagtttgcta	aatgaacatt	gaaattgaaa	tgctttatct	gtgttttctg	taaataaaa	2400
agtgaataaa	tcacc					2415

<210> 64
 <211> 4198
 <212> DNA
 <213> Homo sapiens

<400> 64						
ctgctatcaa	aaaggccata	aggattttgt	ccccaaattt	cacatgagct	acctgtcttc	60
aaactactga	gatgaagggg	gcaagattat	ttgtccttct	ttctagttta	tggagtgggg	120
gcattgggct	taacaacagt	aagcattctt	ggactatacc	tgaggatggg	aactctcaga	180
acactatgcc	ttctctgtca	gttctcccaa	ataaaataca	aagtttgcaa	atactgccaa	240
cgactcgggt	catgtcggcg	gagatagcta	caactccaga	ggcaagaact	cttgaagaca	300
gtcttcttaa	atcaacactg	cctccctcag	aaacaagtgc	acctgctgag	gggtgtgaaa	360
atcaaaactc	cacatccaca	gagaaagcag	aaggagtggg	caagttacag	aactcttacc	420
tcaccaacaa	gcctagcatc	aagttcaatc	ctggagcaga	atcagtggtc	ctttccaatt	480
ctacactgaa	attttcttcag	agctttgcc	gaaagtcaaa	tgaacaagca	acttctctaa	540
acacagttag	aggcactgga	ggcattggag	gcgttggagg	cactggaggc	gtgggaaatc	600
gagcccccag	ggaaacatc	ctcagccggg	gtgacagcag	ttccagccaa	agaactgact	660
accaaaaatc	aaatttcgaa	acaactagag	gaaagaattg	gtgtgtctat	gtacatacca	720
ggttatctcc	cacagtga	ttggacaacc	aggtcactta	tgtcccaggt	gggaaaggga	780
cttgtggctg	gaccggtgga	tcctgtctcc	agagatctca	gaagatatcc	aatcctgtct	840
ataggatgca	acataaaaatt	gtcacctcat	tggattggag	gtgctgtcct	ggatacagt	900
ggccgaaatg	tcaactaaga	gcccaggaac	agcaaaagtt	gatacacacc	aaccaggctg	960
aaagtcatat	agctgtttggc	agaggagttag	ctgagcagca	gcagcagcaa	ggctgtgggt	1020
accaggaaagt	gatgcaaaaa	atgactgtat	aggtgaacta	ccaggcaatg	aaactgactc	1080
ttctgcagaa	gaagattgac	aatatttctt	tgactgtgaa	tgatgtgaagg	aacacttact	1140
cctccctaga	aggaaaaagt	agcgaagata	aaagcagaga	atttcaactc	cttctaaaaa	1200
gtctaaaaatc	caaaagcatt	aatgtactga	taagagacat	agtaagagaa	caatttataa	1260
tttttcaaaa	tgacatgcaa	gagactgtag	caacagctct	caagactgta	tcaagtctat	1320
cagaggacct	cgaaagcacc	aggcaataaa	ttcaaaaaat	taatgaactc	gtggtttcaa	1380
tagcagccca	gcaaaagtgt	tttttgggtc	aagagaatcg	gccccatttg	actgatatag	1440
tggaaactaag	gaatcacatt	gtgaattgaa	ggcaagaagt	gactcttaca	tgtgagaagc	1500
ctattaaaga	actagaagta	aagcagactc	atttagaagg	tgctctagaa	caggaaactc	1560
caagaagcat	ctctgtattat	gaatccctca	ataaaaactc	ttctaaaattg	aagggaagtac	1620
atgagcagct	tttatcaact	gaacagggtat	cagaccagaa	gaatgtctca	gctgtgtgag	1680
cagttagcaa	taatgtcact	gagtaactgt	ctactttaca	tgaaaatatg	ttacatgtgt	1740
gtttgtatga	gctgcaaaat	tttgaagatt	tgcaacttca	agaaagcaag	attaacaact	1800
tcaccgtctc	tttggagatg	gagaaaagagt	ctctcagagg	tgaattgtgaa	gacatgttat	1860
ccaaatgcag	aaatgtattt	aaatttcaac	ttaaggacac	agaagagaat	ttacatgtgt	1920
taaatcaaac	attggctgaa	gttctctctc	caatggacaa	taagatggac	aaaatgagtg	1980
agcaactaaa	tgattttgact	tatgatattg	agatccttca	accttgtct	gagcagggag	2040
catcactcag	acagacaagt	acatatgaac	aaccaaaagg	agcaatagtg	ataaggaaaa	2100
agatagaaaa	tctgactagt	gctgtcaata	gtctaaattt	tattatcaaa	gaacttacia	2160

aaagacacaa	cttacttaga	aatgaagtac	agggctcgtga	tgatgcctta	gaaagacgta	2220
tcaatgaata	tgccttagaa	atggaagatg	gcctcaataa	gacaatgact	attataaata	2280
atgctattga	tttcattcaa	gataaactatg	ccctaaaaga	gactttaagt	actattaagg	2340
ataatagtga	gacatcatcat	aaatgtacct	ccgatatgga	aactattttg	acattttatc	2400
ctcagttcca	cgcctggaat	gattctattc	agactttggg	caatgacaat	cagagatata	2460
actttgtttt	gcaagtcgcc	aagacccttg	caggatattcc	cagagatgag	aaactaaatc	2520
agtcacaact	ccaaaagatg	tatcaaatgt	tcaatgaaac	cacttcccaa	gtgagaaaa	2580
accagcaaaa	tatgagtcac	ttggaagaaa	aactactcct	aactaccaag	atttccaaaa	2640
attttgagac	tcggttgcaa	gacattgagt	ctaaagtac	ccagacgctc	ataccttatt	2700
atatttcagt	taaaaaaggc	agtgtagtta	caaatgagag	agatcaggct	cttcaactgc	2760
aagtattaaa	ttccagattt	aaggcgttgg	aagcaaaatc	tatccatcct	tcaattaact	2820
tcttttcgct	taacaaaact	ctccacgaag	ttttaacaat	gtgtcacact	gctctacaaa	2880
gtgtgtcaga	actgaatgct	accatcccta	agtggataaa	acattccctg	ccagatattc	2940
aactctctca	gaaaggtcta	acagaatttg	tggaaaccaat	aattcaataa	aaaactcaag	3000
ctgcccctac	taattccaat	tgtgtgatag	atcgatcggt	gcctggtagt	ctggcaaatg	3060
ttgtcaagtc	tcagaagcaa	gtaaaatcat	tgccaaagaa	aattaaacgca	cttaagaaac	3120
caacggtaaa	tcttaccaca	gtcctgatag	gccggactca	aagaaacacg	gacaacataa	3180
tatatcctga	ggagtattca	agctgtagtc	ggcatccgtg	ccaaaaaggg	ggcacgtgca	3240
taaatggaa	taactagctt	acctgtgcct	gcagacatcc	ttttactggg	gacaactgca	3300
ctatcaagct	tgtggaagaa	aatgctttag	ctccagatgt	ttccaaagga	tcttacagat	3360
atgcaccact	gggtggcatt	tttgcatctc	atacgtatgg	aatgactata	ctcggctcta	3420
tctctgttaa	taacttggat	gtcaatttat	gagcttctata	taccccaaga	actggaaaaa	3480
ttagaattcc	gtatcttggg	gtatatgttt	tcaagtacac	ctcagagtca	tttagtgctc	3540
atatttcttg	attttttagt	gttgatggaa	tgacaagct	tgcatttgag	ctgaaaaata	3600
ttaacagtga	aatacactgt	gatagggttt	taactgggga	tgcccttatta	gaattaaatt	3660
atggggcagga	agtcctgggt	cgacttgcaa	aaggaacaat	tcagccaag	ttccccctg	3720
ttactacatt	tagtggctat	ttattatata	gtacataagt	tagtatgaa	aacagactat	3780
caacctttatt	gagaaacagc	cagtggtttc	atttatcttt	gcttgcacat	ctgctctgtt	3840
tgtggttttc	tacaggaaaat	gaaaaatcac	ttgttttttt	aatatgagta	aacttgtgat	3900
tctattttat	aaaaattatt	gaatatgtgt	taatgtctga	atatgaaaga	gttcttgatc	3960
ctaaagaaat	ttagtggcac	agaaaaacaa	gtgaatttgt	tagcataatt	attcctattc	4020
ttatttcttc	attttttaagtc	attgcaatgg	aaagtaatat	tataaaaacg	taattacaac	4080
atattatcag	tcacagtttt	ctttccaat	aaacacttaa	cttttgttat	tccctgtata	4140
taaatatata	acacacattt	tctagattca	caaatttaaa	taaattactc	aaaaaatg	4198

<210> 65

<211> 1664

<212> DNA

<213> Homo sapiens

<400> 65

gtcgcgcgcg	ggccgcgcgt	gagccgcgat	gagccccggg	cgccggcagc	ctgcttctctg	60
ggcgacgtgt	gtttctgggt	ggagcggacc	cctgtgcacg	agggcagccca	gcgggggtgag	120
agcctgcagc	tgcaacagct	gacgcagagc	ggcgccctgc	tgaaccagggt	caccgtggac	180
tccatcacgc	ccctgcacgc	agccagtcgt	cagggccacg	cgcggtgtgt	gcagctgcgtg	240
ctggcggtct	ggggccaggt	ggatgtctgc	aacatcgacg	gcagcaccctc	gctctgcgat	300
gcctgcgcct	cgggcagcat	cgagtgtgtg	aagctcttgc	tgtcctacag	ggccaaggctc	360
aaccctcccc	tgtacacagc	gtccccctg	cacgaggcca	gctttccccg	cctcctgagc	420
accctggctt	cgacgcctgt	gatcacaatg	gccagggtga	actcctgggg	gacatggatc	480
gcaatgaatt	cgaccagtat	ttgaacactc	ctggccaccc	agactccgcc	acaggggcca	540
tggccctcag	tggggcatgt	ccgggtctcc	aggtgacacc	aacgggtccc	acagagacca	600
gcctcatctc	gctcctggct	gatgccacgg	ccacgtacta	caacagctgc	agtggtgcat	660
agagctggag	gcgcccgcgc	cggtcagccc	tcgcgccttc	tccttctgtg	gccttgagtg	720
gcagaggagc	cgtccagccc	caccagcttc	cctccacccg	ctcagggcag	ggaggtctga	780
actgcggccc	cacagacctt	ggcctaagct	ggactctcct	tatccgagtg	ccgcctctat	840
ccccctcccc	accttccagc	ccctgcagcc	cacattttaa	gtatatctct	tcaagtgagt	900
tttctccag	ccctcagag	ttgctgtctc	ccagtggaat	gttcaactga	gtctttctct	960
ggtagccatc	atcgaaacta	atggggggac	agacttgata	gccaaaggctc	cttctgggtcc	1020
agttttctga	tttagggttc	tctcaagatt	aataaaggaa	gatggggaaa	tttgactcat	1080
taatgagctc	gctaaccctac	gatctgggtg	taattttgtg	tgcaacgccc	aaggaccacg	1140
aggctttctg	cactttctgc	acccctctcc	aaagtgacca	caaaatttca	aagggactca	1200

tacaatttga	gaaaaaacag	tcaacctgat	ttgagaaatt	aaccagtatg	gctaactata	1260
tcacagaaaa	tgggattgag	ttaaaactat	tttattttta	atatacattt	taaagcagtt	1320
cttttttttt	tgttaatttg	tttattatac	acacacttca	agagaatatg	cacagcttag	1380
gccgggcacg	gtggctcacc	cctgtaatcc	cagcactttg	ggaggccgag	gcattgtggat	1440
cacctgaggt	caggagtttg	agaccagcct	agacaacatg	gtgaaacctt	gtctctatga	1500
aaaatacaaa	atttgctggg	agtgggtggg	catgcctgta	atcccagcta	cttggaaggc	1560
tgaggcagga	gaattgtctg	aacctaggag	gtggagggtg	cagtggagctg	agattgcacc	1620
attgcactcc	agcctgtgca	acaagagtga	aactccattt	caag		1664

<210> 66
 <211> 2521
 <212> DNA
 <213> Homo sapiens

<400> 66						
atggctgc	ataagcccaa	gggtcagaat	tctttggcct	tacacaaagt	catcatgggtg	60
ggcagtggtg	gcgtgggcaa	gtcagctctg	actctacagt	tcattgtacga	tgagttttgtg	120
gaggactatg	agcctaccaa	agcagacagc	tatcggaaga	aggtagtgct	agatggggag	180
gaagtccaga	tcgatattct	agatcacagt	gggcaggagg	actacgctgc	aattagagac	240
aactacttcc	gaagtgggga	ggggttccct	tgtgttttct	ctattacaga	aattggaatcc	300
tttgcagcta	cagctgactt	caggggagcag	attttaagag	taaaagaaga	tgagaatggt	360
ccattttcac	tggttggtaa	caaatacagat	ttagaagata	aaagacaggt	ttctgtagaa	420
gaggcaaaaa	acagagctga	gcagtggaa	gttaactacg	tggaacatc	tgctaaaaa	480
cgagctaagt	ttgacaaggt	attttttgat	ttaatgagag	aaattcgagc	gagaaagatg	540
gaagacagca	aagaaaaagaa	tggaaaaaag	aagaggaaaa	gtttagccaa	gagaatcaga	600
gaaagatgct	gcattttata	atcaaagccc	aaactccttt	cttatcttga	ccatacta	660
aaatataat	tataagcatt	gccattgaag	gcttaattga	ctgaaattac	tttaaccatt	720
tggaaattgt	tgtatatcac	taaaagcatg	aattggaact	gcaatgaaag	tcaaatttac	780
tttaaaaaa	aatataatgt	gcttcaccaa	gaagcaaatg	tcaactttat	tcataattgc	840
ctacatttat	catggtcctg	aagttagcgt	gtaagcttgt	gtttcttggg	cagctctttct	900
tgaatttgaa	gaggtgaaat	gggggtgggg	agtgaggaga	aaggtgactt	ccctcgtggt	960
ttattataaa	gcttaaaatt	tatatcattt	taaaatgtct	tggtcttcta	ctgccttgaa	1020
aaatgacaa	tgtgaacatg	atagtttaaac	taccactttt	tttaaccatt	attatgcaaa	1080
attttagaaga	aaagtatttg	gcattggtgt	tgcataatgt	taaactgaga	gtaattcatc	1140
tgtgaatctg	cttttaattac	ctggtgagta	acttagaaaa	gtgggtgtaa	ctgttacaatg	1200
gaattttttg	aatatgcctt	aattttagaaa	ctgaaaaata	tccgggtata	tcattctggg	1260
tgtgttctta	ctgacaccag	gggtccgctg	ccccatgtgt	cctgggtgaga	aaatatatgc	1320
ctggcacagc	ttttgtatag	aaaattcttg	agaagtaact	gtccgctaga	agtctgtcca	1380
aatttaaaa	gtgtgccata	ttctggttct	tgaaaataag	attccagagc	tctttgatcg	1440
cttttaataa	actgcaagtt	catttttaatt	gaagggccag	catatatact	tgcaagataa	1500
ttttcagctg	caaggattca	gcaccagtta	tgtttgaatg	aacctctcct	ttctctgaga	1560
ttctgggtccc	tggaaatccc	tttctgctag	tggtgagcat	gtaagtgtta	agtttttaatt	1620
ctgggagcag	ggcataggaa	gaaaatgtca	gtagtgtcaa	tgcattttgc	actagaacgc	1680
tccgggaaaa	tattcatgct	tgccattctg	tcattttctaa	atttatattc	ataaagttac	1740
agtttgatac	aggaattatt	aggagtaatt	cttttctgtt	tctgtttata	atgaagaaca	1800
ctgtagctac	attttcagaa	gttaacatca	agccatcaaa	cctgggtata	gtgcagaaga	1860
cgtggcacac	actgaccaca	cattaggctg	tgtcaccatt	gtgtgggtga	cctgctggaa	1920
gaattctagc	atgctacttg	gggacataat	ttcagtggga	aatatgccac	tgaccgattt	1980
tttttttttt	cccttttgca	gtggggctag	gacagttgat	tcaacaaggt	atttttttct	2040
tttttctcag	tcctaatttg	gacaggtcaa	agatgtgttc	aggcatccca	ggtaacaggt	2100
gtgtatgtaa	agttaaaaat	aggcttttaa	ggaactcact	ctttagatct	ttacatccag	2160
cttctcatgt	taaatatttg	tccttaaaag	gtttgagatg	tacatctttc	atttcgtatt	2220
ttctcatagg	tatgcctatg	gcggaaatca	agttaccaat	gtaacactgg	ccagcgggccc	2280
cagcaatctc	catgtgtact	tattcacgtc	ttatttaacc	aggggttcta	accactaaca	2340
ttgtgacttt	gctttgagac	ctttcctctc	ctgggtactg	aggtgctatg	aagccaactg	2400
acaaagatgc	atcacgtgtc	ttaggcctgat	gccactaccc	gatttgttta	tttgcaattt	2460
gagccattta	aagaccaata	aacttccctt	tttaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	2520
a						2521

<210> 67
 <211> 5059
 <212> DNA
 <213> Homo sapiens

<400> 67

ctgggttctca	accttctttt	aaataatggt	catagagaag	gagggctgtc	tgagattcca	60
gggaaacaag	ctctcaggac	ttccgggtcg	catgatggct	gtgggcggtg	aacgcggtta	120
gtgcaagcat	ctgggcccac	ttcaatggta	aaaaagatac	agtaaaagaca	taaataccac	180
attttgacaaa	tggaaaaaaa	ggagtggtcca	gaaaagagta	gcagcagtga	ggaagagctg	240
ccgagacggg	tatacaggga	gctacocctgt	gtttctgaga	ccctttgtga	catctcacat	300
tttttccaag	aagatgatga	gacagaggca	gagccattat	tgttccgtgc	tgttcctgag	360
tgtaacctat	ctggggggga	cattccocagg	agacatttgc	tcagaagaga	atcaaatagt	420
ttcctcttat	gcttctaaag	tctgttttga	gatcgaagaa	gattataaaa	atcgtcagtt	480
ctctggggcct	gaaggaaaatg	tggatgttga	gttgattgat	aagagcacaa	acagatacacg	540
cggtttgggtc	cccactgtcg	gctggtatct	gtggtcagcc	acaggcctcg	gcttccgtgt	600
aagggatgag	gtcacagtga	cgattgcgtt	tggttcctgg	agtcagcacc	tggcccttga	660
cctgcagcac	catgaacagt	ggctgggtggg	cggcccccctg	tttgatgtca	ctgcagagcc	720
agaggaggct	gtgcgcgaaa	ttccacctccc	ccacttcac	tcctcccaag	gtgagggtga	780
cgtctcctgg	tttctcgttg	cccatttttaa	gaatgaaggg	atggctcctg	agcatccagc	840
ccgggtggag	cctttctatg	ctgtccttga	aagccccagc	ttctctctga	tgggcatcct	900
gctgcggatc	gccagtggga	ctcgccctctc	catcccccac	acttcccaac	catgtatcta	960
ttatcacccc	caccccggaag	atattaagtt	ccacttgtac	cttgtcccca	gcgacgcctt	1020
gctaacaaag	gcgatagatg	atbgaggaag	tcgcttccat	gggtgtcgcc	tcgacagattc	1080
gcccccaatg	gaacccttga	actttgggtc	cagttatatt	gtgtctaatt	ctgctaacct	1140
gaaagttaag	cccaaggagt	tgaatttgtc	ctacaggagc	cctggagaaa	ttcagcactt	1200
ctcaaaattc	tatgctgggc	agatgaagga	accatttcaa	cttgagatta	ctgaaaaaag	1260
acatgggact	ttgggtgtggg	atactgaggt	gaagccagtg	gatctccagc	ttgtagctgc	1320
atcagccctt	cctcctttct	caggtgcagc	ctttgtgaag	gagaaccacc	ggcaactcca	1380
agccaggtat	ggggacctga	aggggtgtct	cgatgatctc	caggacaatg	aagttcttac	1440
tgagaatgag	aaggagcttg	tggagcagga	aaagacacgg	cagagcaaga	atgagccctt	1500
gctgagcatg	gtggagaaga	aaggggacct	ggccctggac	gtgctcttca	gaagcattag	1560
tgaaagggag	ccttacctcg	tgctctatct	tagacagcag	aattttgtaa	atgagtcagt	1620
taggtagtct	ggaagagaga	atccagcggt	ctcatttgaa	atggataaac	agaaattgtga	1680
tcatttgattt	cagtgttcaa	gacagaaaag	gactgggtaa	catctatcac	acaggctttc	1740
aggacagact	tgtaaccttg	catgtacctt	ttgactgtat	cctcatgoat	tttctcgaag	1800
aatgtctgaa	gaaggttagt	atattccttt	taaaattttt	ccaaccattg	cttgatatat	1860
cactattttt	tcatttgaca	tgattcttga	agaccacagga	taaaggacat	ccggatagggt	1920
gtgtttatga	aggatggggc	ctggaaaagg	aacttttcc	gattaatgtg	aaaaataatt	1980
cctatggaca	ctccgttttg	agtatcacct	tctcataact	aaaagcgaaa	aagctaacaa	2040
aaagcttctca	gtgagggaca	ctcaaggcat	acatgatgac	agtccttttt	ttttttgtat	2100
gttaggactt	taacacttta	tctatggcta	ctgttattag	aacaatgtaa	atgtatttgc	2160
tgaaagagag	cacaaaaaatg	ggagaaaaatg	caaacatgag	cagaaaaatat	tttccactg	2220
gtgtgtagcc	tgctacaagg	agttgttggg	ttaaatgttc	atggccaact	ccaaggaata	2280
ctgagatgaa	atgtgtgtaaa	tcaactccac	agaaccacca	aaaagaaaaat	gagggtaatt	2340
cagcttatct	tgagacagac	atctcctggca	atgtaccata	caaaaaataa	gcgcaactctg	2400
acatttggat	tctaccatag	actctgtcat	tttgtagcca	tttcaagctgt	cttttgatta	2460
atgttttcgt	ggcacacata	tttccatcct	tttatgttta	atctgtttta	aacaagttcc	2520
tagtagacac	catctgggtg	agtcagtttt	ttttatgggt	tattttgaac	ccattctgat	2580
agtcctcttt	aactgggaag	tttcaattac	ttacgttaat	gtaattatta	atatgttagg	2640
atttatcctc	agtcagccag	tttgtttatg	cttttctatt	ctactgtttat	cacatttcta	2700
ccactttaaag	tggaaactag	gcactttatc	accatttaga	tctatttacc	ttttctcatc	2760
taggatatag	ttactctcta	cataactctt	ctgtatctta	aaaccatcca	ataaaatttt	2820
atatattttc	tacttttaac	cactcagaag	atttaaaaaa	ctcatgagaa	gggtaactctg	2880
ttatgttttt	ccagatattt	accatttctg	ttgctcttcc	ttcattattt	tccaaaatttc	2940
gttctgcaaa	tttccacttc	ttctgataga	cgttttttag	ttctttttag	gtgggtctga	3000
ttctgtacaga	ttctcttatt	ttttgcttcc	ttctgaggaca	tctttttctc	acottctcatc	3060
tcagtgatgt	tttttgcttg	tagtattttt	agttgacatt	gtttttctgt	cagcagtttc	3120
cttttagctt	ccgtatttcc	tgtatgagaaa	ctcgcagtc	ttcaaaattgt	tgtttccctg	3180
tatgtatggt	gtcatttttc	ttctcagatt	caagggtattt	atcttttagtt	tttagccatt	3240
tcattatggt	ggggatgagt	ttccttgttt	tattcccttt	ggaattttgt	ccaattcata	3300

aatttgcagt	tttatgtctt	ttaccaaact	tagagggttt	cagcctaatt	tctaaaaata	3360
cttttttatta	gcctgacttt	catcttttata	ggaaatagtt	taagtgtatga	caagttccaa	3420
tagcttatata	gcccagaagg	ccctcaaaat	aagaattttg	aaagaataca	gaaaaccaa	3480
ttttatatcc	ttctcatgbc	ttctactgta	aaattccatat	gctttgtctac	tctaaacct	3540
gtttgaaate	aacagtcctg	agaatagatg	aaaattttga	tgaatagtgg	aattctttta	3600
aatggaaacc	tctttacatg	gatttttcctt	gccatctaga	aataaaccat	agttatttatg	3660
ttgaatcaat	caatattata	ttttgttttt	ttctctctct	tctgagactc	tatttgtgga	3720
aatggttagac	ttttatgttt	tcttaaatgt	ccctgatatt	ctacttattt	agaacatctt	3780
ttcattttttt	ccattattct	gattgggttaa	ttttaatttg	tctattttca	aatttgcctg	3840
agtgttccacc	tggtgtgtgc	tggtgtgtcc	cactgagtcg	attcaccacc	ttttaaattt	3900
tggtcactgt	atgtatcagt	tctaaaattt	ccattttgtt	ctctatat	taaatctctt	3960
ggcttatatt	ctatttttct	gcaaatgtgt	cagcatttgc	ttgtttgagc	tttttttttt	4020
tcaagacagg	gtctcaactc	tgttaccag	gctggagtcg	agtgggtcga	tctcagctca	4080
ctgcaacctc	tgccctcctg	ttcaaagcat	tattgtgcct	cagcctcctg	agtagctggg	4140
attacaggca	tgaccacca	cagccagct	aattttttgt	atttttagta	gagacagagt	4200
tttgctatgt	tgccaggct	ggttttgaa	tcctggcctc	aagtgatcca	cccacctcag	4260
ctctccaaag	ctcggggatt	acagggccact	acacctggca	catttgagta	tttttttttt	4320
tttttttttt	ttgagatgga	gtctcgctct	gtcatctagg	ctggagtgca	gtgggtgtat	4380
ctcagctcac	tgacgctct	gtctcccggg	ctcaaagcat	tctctgtcct	cagcctcctg	4440
agtagctagg	actacagggt	catgccaaaca	cgccccggta	atttttttaa	aaaatatttt	4500
tagtagagac	agggtttcac	cattttggcc	aggatggctc	cgatctcctg	acctcatgat	4560
ccaccgcctc	cgcccttcca	aagtcctggg	attacaggca	tgagccaccg	tgccctggcct	4620
catttgagta	tttttataat	gtctctttta	aagtctttgt	cagataaattc	cactgtacat	4680
gttattcagt	gtttgtgtgc	cactgagttg	tcatttgcca	gacaagtgga	gatttttgca	4740
gtctatcctt	gtattctcag	tagttccgat	atgtaccctc	gacatgtgaa	tgttatctta	4800
tgagactctg	ttttatttgt	atccaacaga	agatgtttat	tatttatattg	gctttctgtg	4860
aactgaggtc	ttaatatcatg	ctcattttta	aagtccttgc	agtggtattc	ggatctatcc	4920
tggtgtgtgcc	tatgagattg	ggtagctgtg	atcctgttag	ctccattctc	agggcggttg	4980
aatgtgaatt	aggaccagcg	caatgaatgc	tcaagttggg	gttggggcgtt	agaattcata	5040
aaagtcctta	tatgctcag					5059

<210> 68
 <211> 2279
 <212> DNA
 <213> Homo sapiens

<400> 68						
catctccccc	aacctggggg	tctgtgtctt	caacgcctgc	gaggccgcgt	cgcggtctggc	60
gcgcgcgcag	gatgaggcgg	agctggcgct	gagcctcctg	gcgcagctgg	gcatcacgcc	120
ttctgcacct	agccgcggcc	ccgtgccagc	caaacccacc	gtgtctctcg	agaagatggg	180
cgtggggccg	ctggacatgt	atgtgctgca	ccgcctctcc	gcggcgcccg	agcgcacgct	240
ggcctctgtg	tgccgcttgc	tggtgtggca	cccgcggcgc	cccgccgaga	aggtggttgc	300
cgctgtgttc	cccggttgca	ccccgcggc	ctgcctcctg	gacggcctgg	tccgcctgca	360
gcaacttgag	ttctctgcag	agcccggtgt	gacgcgccag	gacctggagc	ggcgggggcg	420
agccgagagc	aaagagagcg	tgggctcccg	ggacagctcg	aagagagagg	gcctcctggc	480
caccacacct	agacctggcc	aggagcgccc	tggggtggcc	cgcaaggagc	cagcacgggc	540
tgaggcccca	cgcaagactg	agaaagaagc	caagaccccc	ggggagttag	agaaagaccc	600
caaacgcagt	gtctcccggg	ccagcccgcg	ggaggtgcgc	cgggcgagct	cttctgtgcc	660
caacctcaag	aagacgaatg	ccagggcgcc	acccaagccc	cgcaaaagcct	ccagcacgtc	720
ccactctggc	ttcccgccgg	tggcaaatgg	accccgcgag	ccgccagacc	tccgatgtgg	780
agaagccagc	ccccccagtg	cagcctgcgg	ctctccggcc	tcccagctgg	tggccacgcc	840
cagctcggag	ctggggcgga	tcccagccgg	ggaggagaag	gcactggagc	tgcttttggc	900
cgccagctca	atcccaaggc	cacgcacacc	ctcccctgag	tcccacccga	gccccgcaga	960
gggcagcgag	cggtgtctgc	tgagccccac	gcggggcggg	gaggccgggg	cagacgcctc	1020
accacacagt	accacacccc	cggtgaccac	gcctcacta	ccgcagagag	tgggctcccc	1080
gcactcgacc	gaggtggaag	agtcctctgc	ggtgtccttt	gagcaggtgc	tgccgccatc	1140
cgccccacac	agtgaggctg	ggctgagcct	cccgtctcgt	ggcccccgcg	cgccggcgtc	1200
ggcttcccca	cacgatgtgg	acctgtgcct	ggtgtcacc	tgtgaatttg	agcatcgcaa	1260
ggcggtgcc	atggcacccg	cacctcgctc	ccccggcagc	tgaattgaca	gcagtgcccc	1320
gtcacaggaa	gggcaggtg	ggctgggggc	cgaggagacg	ccaccacatc	cggtcagcga	1380
gtccctgccc	acctgtctgc	actcggatcc	cgtgccctgc	gccccgggtg	cgccagactc	1440

agacgaagac	acagagggct	ttggagtccc	tgcacacgac	cctttgcctg	acccccctcaa	1500
gggtcccccca	ccactgectg	acccatccag	catctgcatg	gtggaccctg	agatgctgcc	1560
ccccaaagaca	gcacggcaaa	cggagaacgt	cagccgcacc	cggaaagcccc	tggccccgcc	1620
caactcacgc	gctgccgccc	ccaaagccac	tccagtggct	gctgccaaaa	ccaaggggct	1680
tgctgggtggg	gaccgtgcca	gccgaccact	cagtgcocgg	agtgaagcca	gtgagaaggg	1740
aggccgggca	ccccgttcca	gaaagtcttc	aaccccccaag	actgccactc	gaggccccgtc	1800
gggggtacgcc	agcagccggc	cgggggtgtc	agccacccca	cccaagtccc	cgggtctacct	1860
ggacctggccc	tacctgcccc	gcgggagcag	cgcccacctg	gtggatgagg	agttcttcca	1920
gcgcgtgcgc	gcgctctgct	acgtcatcag	tggccaggac	cagcgcgaag	aggaaggcat	1980
gcggggccgtc	ctggacgcgc	tactggccag	caagcagcat	tgggaccgtg	acctgcaggt	2040
gacctgtatc	cccactttcg	actcgggtggc	catgcatacg	tggtacgcag	agacgcacgc	2100
ccggcaccag	gcgctgggca	tcacgggtgtt	gggcagcaac	ggcatgggtg	ccatgcagga	2160
tgacgccttc	ccggcctgca	aggtggagtt	ctagcccat	cgccgacacg	ccccccactc	2220
agccccgcc	gcctgtccct	agattcagcc	acatcagaaa	taaactgtga	ctacacttg	2279

<210> 69
 <211> 229
 <212> PRT
 <213> Homo sapiens

<400> 69															
Met	Gly	Asp	Lys	Ile	Trp	Leu	Pro	Phe	Pro	Val	Leu	Leu	Leu	Ala	Ala
1				5					10					15	
Leu	Pro	Pro	Val	Leu	Leu	Pro	Gly	Ala	Ala	Gly	Phe	Thr	Pro	Ser	Leu
			20					25					30		
Asp	Ser	Asp	Phe	Thr	Phe	Thr	Leu	Pro	Ala	Gly	Gln	Lys	Glu	Cys	Phe
		35					40					45			
Tyr	Gln	Pro	Met	Pro	Leu	Lys	Ala	Ser	Leu	Glu	Ile	Glu	Tyr	Gln	Val
	50					55					60				
Leu	Asp	Gly	Ala	Gly	Leu	Asp	Ile	Asp	Phe	His	Leu	Ala	Ser	Pro	Glu
	65				70					75				80	
Gly	Lys	Thr	Leu	Val	Phe	Glu	Gln	Arg	Lys	Ser	Asp	Gly	Val	His	Thr
			85					90					95		
Val	Glu	Thr	Glu	Val	Gly	Asp	Tyr	Met	Phe	Cys	Phe	Asp	Asn	Thr	Phe
			100					105					110		
Ser	Thr	Ile	Ser	Glu	Lys	Val	Ile	Phe	Phe	Glu	Leu	Ile	Leu	Asp	Asn
	115					120					125				
Met	Gly	Glu	Gln	Ala	Gln	Glu	Gln	Glu	Asp	Trp	Lys	Lys	Tyr	Ile	Thr
	130					135					140				
Gly	Thr	Asp	Ile	Leu	Asp	Met	Lys	Leu	Glu	Asp	Ile	Leu	Glu	Ser	Ile
	145				150					155				160	
Asn	Ser	Ile	Lys	Ser	Arg	Leu	Ser	Lys	Ser	Gly	His	Ile	Gln	Thr	Leu
			165						170				175		
Leu	Arg	Ala	Phe	Glu	Ala	Arg	Asp	Arg	Asn	Ile	Gln	Glu	Ser	Asn	Phe
		180						185					190		
Asp	Arg	Val	Asn	Phe	Trp	Ser	Met	Val	Asn	Leu	Val	Val	Met	Val	Val
		195					200					205			
Val	Ser	Ala	Ile	Gln	Val	Tyr	Met	Leu	Lys	Ser	Leu	Phe	Glu	Asp	Lys
		210				215					220				
Arg	Lys	Ser	Arg	Thr											
	225														

<210> 70
 <211> 381
 <212> PRT
 <213> Homo sapiens

<400> 70															
Met	Gly	Pro	Thr	Ser	Val	Pro	Leu	Val	Lys	Ala	His	Arg	Ser	Ser	Val
1					5				10					15	

```

Ser Asp Tyr Val Asn Tyr Asp Ile Ile Val Arg His Tyr Asn Tyr Thr
                20                25                30
Gly Lys Leu Asn Ile Ser Ala Asp Lys Glu Asn Ser Ile Lys Leu Thr
                35                40                45
Ser Val Val Phe Ile Leu Ile Cys Cys Phe Ile Ile Leu Glu Asn Ile
                50                55                60
Phe Val Leu Leu Thr Ile Trp Lys Thr Lys Lys Phe His Arg Pro Met
65                70                75                80
Tyr Tyr Phe Ile Gly Asn Leu Ala Leu Ser Asp Leu Leu Ala Gly Val
                85                90                95
Ala Tyr Thr Ala Asn Leu Leu Leu Ser Gly Ala Thr Thr Tyr Lys Leu
                100                105                110
Thr Pro Ala Gln Trp Phe Leu Arg Glu Gly Ser Met Phe Val Ala Leu
                115                120                125
Ser Ala Ser Val Phe Ser Leu Leu Ala Ile Ala Ile Glu Arg Tyr Ile
130                135                140
Thr Met Leu Lys Met Lys Leu His Asn Gly Ser Asn Asn Phe Arg Leu
145                150                155                160
Phe Leu Leu Ile Ser Ala Cys Trp Val Ile Ser Leu Ile Leu Gly Gly
                165                170                175
Leu Pro Ile Met Gly Trp Asn Cys Ile Ser Ala Leu Ser Ser Cys Ser
                180                185                190
Thr Val Leu Pro Leu Tyr His Lys His Tyr Ile Leu Phe Cys Thr Thr
195                200                205                210
Val Phe Thr Leu Leu Leu Leu Ser Ile Val Ile Leu Tyr Cys Arg Ile
210                215                220                225
Tyr Ser Leu Val Arg Thr Arg Ser Arg Arg Leu Thr Phe Arg Lys Asn
225                230                235                240
Ile Ser Lys Ala Ser Arg Ser Ser Glu Asn Val Ala Leu Leu Lys Thr
                245                250                255
Val Ile Ile Val Leu Ser Val Phe Ile Ala Cys Trp Ala Pro Leu Phe
260                265                270                275
Ile Leu Leu Leu Leu Asp Val Gly Cys Lys Val Lys Thr Cys Asp Ile
275                280                285                290
Leu Phe Arg Ala Glu Tyr Phe Leu Val Leu Ala Val Leu Asn Ser Gly
290                295                300                305
Thr Asn Pro Ile Ile Tyr Thr Leu Thr Asn Lys Glu Met Arg Arg Ala
305                310                315                320
Phe Ile Arg Ile Met Ser Cys Cys Lys Cys Pro Ser Gly Asp Ser Ala
                325                330                335
Gly Lys Phe Lys Arg Pro Ile Ile Ala Gly Met Glu Phe Ser Arg Ser
340                345                350                355
Lys Ser Asp Asn Ser Ser His Pro Gln Lys Asp Glu Gly Asp Asn Pro
355                360                365                370
Glu Thr Ile Met Ser Ser Gly Asn Val Asn Ser Ser Ser
370                375                380

```

<210> 71

<211> 679

<212> PRT

<213> Homo sapiens

<400> 71

```

Met Ala Thr Leu Ile Thr Ser Thr Thr Ala Ala Thr Ala Ala Ser Gly
1                5                10                15
Pro Leu Val Asp Tyr Leu Trp Met Leu Ile Leu Gly Phe Ile Ile Ala
20                25                30                35
Phe Val Leu Ala Phe Ser Val Gly Ala Asn Asp Val Ala Asn Ser Phe
35                40                45                50
Gly Thr Ala Val Gly Ser Gly Val Val Thr Leu Lys Gln Ala Cys Ile
55                60

```

Leu Ala Ser Ile Phe Glu Thr Val Gly Ser Val Leu Leu Gly Ala Lys
 65 70 75 80
 Val Ser Glu Thr Ile Arg Lys Gly Leu Ile Asp Val Glu Met Tyr Asn
 85 90 95
 Ser Thr Gln Gly Leu Leu Met Ala Gly Ser Val Ser Ala Met Phe Gly
 100 105 110
 Ser Ala Val Trp Gln Leu Val Ala Ser Phe Leu Lys Leu Pro Ile Ser
 115 120 125
 Gly Thr His Cys Ile Val Gly Ala Thr Ile Gly Phe Ser Leu Val Ala
 130 135 140
 Lys Gly Gln Glu Gly Val Lys Trp Ser Glu Leu Ile Lys Ile Val Met
 145 150 155 160
 Ser Trp Phe Val Ser Pro Leu Leu Ser Gly Ile Met Ser Gly Ile Leu
 165 170 175
 Phe Phe Leu Val Arg Ala Phe Ile Leu His Lys Ala Asp Pro Val Pro
 180 185 190
 Asn Gly Leu Arg Ala Leu Pro Val Phe Tyr Ala Cys Thr Val Gly Ile
 195 200 205
 Asn Leu Phe Ser Ile Met Tyr Thr Gly Ala Pro Leu Leu Gly Phe Asp
 210 215 220
 Lys Leu Pro Leu Trp Gly Thr Ile Leu Ile Ser Val Gly Cys Ala Val
 225 230 235 240
 Phe Cys Ala Leu Ile Val Trp Phe Phe Val Cys Pro Arg Met Lys Arg
 245 250 255
 Lys Ile Glu Arg Glu Ile Lys Cys Ser Pro Ser Glu Ser Pro Leu Met
 260 265 270
 Glu Lys Lys Asn Ser Leu Lys Glu Asp His Glu Glu Thr Lys Leu Ser
 275 280 285
 Val Gly Asp Ile Glu Asn Lys His Pro Val Ser Glu Val Gly Pro Ala
 290 295 300
 Thr Val Pro Leu Gln Ala Val Val Glu Glu Arg Thr Val Ser Phe Lys
 305 310 315 320
 Leu Gly Asp Leu Glu Glu Ala Pro Glu Arg Glu Arg Leu Pro Ser Val
 325 330 335
 Asp Leu Lys Glu Glu Thr Ser Ile Asp Ser Thr Val Asn Gly Ala Val
 340 345 350
 Gln Leu Pro Asn Gly Asn Leu Val Gln Phe Ser Gln Ala Val Ser Asn
 355 360 365
 Gln Ile Asn Ser Ser Gly His Ser Gln Tyr His Thr Val His Lys Asp
 370 375 380
 Ser Gly Leu Tyr Lys Glu Leu Leu His Lys Leu His Leu Ala Lys Val
 385 390 395 400
 Gly Asp Cys Met Gly Asp Ser Gly Asp Lys Pro Leu Arg Arg Asn Asn
 405 410 415
 Ser Tyr Thr Ser Tyr Thr Met Ala Ile Cys Gly Met Pro Leu Asp Ser
 420 425 430
 Phe Arg Ala Lys Glu Gly Glu Gln Lys Gly Glu Glu Met Glu Lys Leu
 435 440 445
 Thr Trp Pro Asn Ala Asp Ser Lys Lys Arg Ile Arg Met Asp Ser Tyr
 450 455 460
 Thr Ser Tyr Cys Asn Ala Val Ser Asp Leu His Ser Ala Ser Glu Ile
 465 470 475 480
 Asp Met Ser Val Lys Ala Ala Met Gly Leu Gly Asp Arg Lys Gly Ser
 485 490 495
 Asn Gly Ser Leu Glu Glu Trp Tyr Asp Gln Asp Lys Pro Glu Val Ser
 500 505 510
 Leu Leu Phe Gln Phe Leu Gln Ile Leu Thr Ala Cys Phe Gly Ser Phe
 515 520 525
 Ala His Gly Gly Asn Asp Val Ser Asn Ala Ile Gly Pro Leu Val Ala
 530 535 540

Leu Tyr Leu Val Tyr Asp Thr Gly Asp Val Ser Ser Lys Val Ala Thr
 545 550 555 560
 Pro Ile Trp Leu Leu Leu Tyr Gly Gly Val Gly Ile Cys Val Gly Leu
 565 570 575
 Trp Val Trp Gly Arg Arg Val Ile Gln Thr Met Gly Lys Asp Leu Thr
 580 585 590
 Pro Ile Thr Pro Ser Ser Gly Phe Ser Ile Glu Leu Ala Ser Ala Leu
 595 600 605
 Thr Val Val Ile Ala Ser Asn Ile Gly Leu Pro Ile Ser Thr Thr His
 610 615 620
 Cys Lys Val Gly Ser Val Val Ser Val Gly Trp Leu Arg Ser Lys Lys
 625 630 635 640
 Ala Val Asp Trp Arg Leu Phe Arg Asn Ile Phe Met Ala Trp Phe Val
 645 650 655
 Thr Val Pro Ile Ser Gly Val Ile Ser Ala Ala Ile Met Ala Ile Phe
 660 665 670
 Arg Tyr Val Ile Leu Arg Met
 675

<210> 72
 <211> 476
 <212> PRT
 <213> Homo sapiens

<400> 72
 Met Met His Leu Ala Phe Leu Val Leu Leu Cys Leu Pro Val Cys Ser
 1 5 10 15
 Ala Tyr Pro Leu Ser Gly Ala Ala Lys Glu Glu Asp Ser Asn Lys Asp
 20 25 30
 Leu Ala Gln Gln Tyr Leu Glu Lys Tyr Tyr Asn Leu Glu Lys Asp Val
 35 40 45
 Lys Gln Phe Arg Arg Lys Asp Ser Asn Leu Ile Val Lys Lys Ile Gln
 50 55 60
 Gly Met Gln Lys Phe Leu Gly Leu Glu Val Thr Gly Lys Leu Asp Thr
 65 70 75 80
 Asp Thr Leu Glu Val Met Arg Lys Pro Arg Cys Gly Val Pro Asp Val
 85 90 95
 Gly His Phe Ser Ser Phe Pro Gly Met Pro Lys Trp Arg Lys Thr His
 100 105 110
 Leu Thr Tyr Arg Ile Val Asn Tyr Thr Pro Asp Leu Pro Arg Asp Ala
 115 120 125
 Val Asp Ser Ala Ile Glu Lys Ala Leu Lys Val Trp Glu Glu Val Thr
 130 135 140
 Pro Leu Thr Phe Ser Arg Leu Tyr Glu Gly Glu Ala Asp Ile Met Ile
 145 150 155 160
 Ser Phe Ala Val Lys Glu His Gly Asp Phe Tyr Ser Phe Asp Gly Pro
 165 170 175
 Gly His Ser Leu Ala His Ala Tyr Pro Gly Pro Gly Leu Tyr Gly
 180 185 190
 Asp Ile His Phe Asp Asp Asp Glu Lys Trp Thr Glu Asp Ala Ser Gly
 195 200 205
 Thr Asn Leu Phe Leu Val Ala Ala His Glu Leu Gly His Ser Leu Gly
 210 215 220
 Leu Phe His Ser Ala Asn Thr Glu Ala Leu Met Tyr Pro Leu Tyr Asn
 225 230 235 240
 Ser Phe Thr Glu Leu Ala Gln Phe Arg Leu Ser Gln Asp Asp Val Asn
 245 250 255
 Gly Ile Gln Ser Leu Tyr Gly Pro Pro Pro Ala Ser Thr Glu Glu Pro
 260 265 270
 Leu Val Pro Thr Lys Ser Val Pro Ser Gly Ser Glu Met Pro Ala Lys
 275 280 285

Cys Asp Pro Ala Leu Ser Phe Asp Ala Ile Ser Thr Leu Arg Gly Glu
 290 295 300
 Tyr Leu Phe Phe Lys Asp Arg Tyr Phe Trp Arg Arg Ser His Trp Asn
 305 310 315 320
 Pro Glu Pro Glu Phe His Leu Ile Ser Ala Phe Trp Pro Ser Leu Pro
 325 330 335
 Ser Tyr Leu Asp Ala Ala Tyr Glu Val Asn Ser Arg Asp Thr Val Phe
 340 345 350
 Ile Phe Lys Gly Asn Glu Phe Trp Ala Ile Arg Gly Asn Glu Val Gln
 355 360 365
 Ala Gly Tyr Pro Arg Gly Ile His Thr Leu Gly Phe Pro Pro Thr Ile
 370 375 380
 Arg Lys Ile Asp Ala Ala Val Ser Asp Lys Glu Lys Lys Lys Thr Tyr
 385 390 395 400
 Phe Phe Ala Ala Asp Lys Tyr Trp Arg Phe Asp Glu Asn Ser Gln Ser
 405 410 415
 Met Glu Gln Gly Phe Pro Arg Leu Ile Ala Asp Asp Phe Pro Gly Val
 420 425 430
 Glu Pro Lys Val Asp Ala Val Leu Gln Ala Phe Gly Phe Phe Tyr Phe
 435 440 445
 Phe Ser Gly Ser Ser Gln Phe Glu Phe Asp Pro Asn Ala Arg Met Val
 450 455 460
 Thr His Ile Leu Lys Ser Asn Ser Trp Leu His Cys
 465 470 475

<210> 73
 <211> 528
 <212> PRT
 <213> Homo sapiens

<400> 73
 Met Arg Cys Ala Leu Ala Leu Ser Ala Leu Leu Leu Leu Ser Thr
 1 5 10 15
 Pro Pro Leu Leu Pro Ser Ser Pro Ser Pro Ser Pro Ser Pro
 20 25 30
 Ser Gln Asn Ala Thr Gln Thr Thr Thr Asp Ser Ser Asn Lys Thr Ala
 35 40 45
 Pro Thr Pro Ala Ser Ser Val Thr Thr Met Ala Thr Asp Thr Ala Gln
 50 55 60
 Gln Ser Thr Val Pro Thr Ser Lys Ala Asn Glu Ile Leu Ala Ser Val
 65 70 75 80
 Lys Ala Thr Thr Leu Gly Val Ser Ser Asp Ser Pro Gly Thr Thr Thr
 85 90 95
 Leu Ala Gln Gln Val Ser Gly Pro Val Asn Thr Thr Val Ala Arg Gly
 100 105 110
 Gly Gly Ser Gly Asn Pro Thr Thr Thr Ile Glu Ser Pro Lys Ser Thr
 115 120 125
 Lys Ser Ala Asp Thr Thr Thr Val Ala Thr Ser Thr Ala Thr Ala Lys
 130 135 140
 Pro Asn Thr Thr Ser Ser Gln Asn Gly Ala Glu Asp Thr Thr Asn Ser
 145 150 155 160
 Gly Gly Lys Ser Ser His Ser Val Thr Thr Asp Leu Thr Ser Thr Lys
 165 170 175
 Ala Glu His Leu Thr Thr Pro His Pro Thr Ser Pro Leu Ser Pro Arg
 180 185 190
 Gln Pro Thr Leu Thr His Pro Val Ala Thr Pro Thr Ser Ser Gly His
 195 200 205
 Asp His Leu Met Lys Ile Ser Ser Ser Ser Ser Thr Val Ala Ile Pro
 210 215 220
 Gly Tyr Thr Phe Thr Ser Pro Gly Met Thr Thr Thr Leu Pro Ser Ser
 225 230 235 240

Val Ile Ser Gln Arg Thr Gln Gln Thr Ser Ser Gln Met Pro Ala Ser
 245 250 255
 Ser Thr Ala Pro Ser Ser Gln Glu Thr Val Gln Pro Thr Ser Pro Ala
 260 265 270
 Thr Ala Leu Arg Thr Pro Thr Leu Pro Glu Thr Met Ser Ser Ser Pro
 275 280 285
 Thr Ala Ala Ser Thr Thr His Arg Tyr Pro Lys Thr Pro Ser Pro Thr
 290 295 300
 Val Ala His Glu Ser Asn Trp Ala Lys Cys Glu Asp Leu Glu Thr Gln
 305 310 315 320
 Thr Gln Ser Glu Lys Gln Leu Val Leu Asn Leu Thr Gly Asn Thr Leu
 325 330 335
 Cys Ala Gly Gly Ala Ser Asp Glu Lys Leu Ile Ser Leu Ile Cys Arg
 340 345 350
 Ala Val Lys Ala Thr Phe Asn Pro Ala Gln Asp Lys Cys Gly Ile Arg
 355 360 365
 Leu Ala Ser Val Pro Gly Ser Gln Thr Val Val Val Lys Glu Ile Thr
 370 375 380
 Ile His Thr Lys Leu Pro Ala Lys Asp Val Tyr Glu Arg Leu Lys Asp
 385 390 395 400
 Lys Trp Asp Glu Leu Lys Glu Ala Gly Val Ser Asp Met Lys Leu Gly
 405 410 415
 Asp Gln Gly Pro Pro Glu Glu Ala Glu Asp Arg Phe Ser Met Pro Leu
 420 425 430
 Ile Ile Thr Ile Val Cys Met Ala Ser Phe Leu Leu Leu Val Ala Ala
 435 440 445
 Leu Tyr Gly Cys Cys His Gln Arg Leu Ser Gln Arg Lys Asp Gln Gln
 450 455 460
 Arg Leu Thr Glu Glu Leu Gln Thr Val Glu Asn Gly Tyr His Asp Asn
 465 470 475 480
 Pro Thr Leu Glu Val Met Glu Thr Ser Ser Glu Met Gln Glu Lys Lys
 485 490 495
 Val Val Ser Leu Asn Gly Glu Leu Gly Asp Ser Trp Ile Val Pro Leu
 500 505 510
 Asp Asn Leu Thr Lys Asp Asp Leu Asp Glu Glu Glu Asp Thr His Leu
 515 520 525

<210> 74
 <211> 493
 <212> PRT
 <213> Homo sapiens

<400> 74
 Met Leu Lys Ala Leu Phe Leu Thr Met Leu Thr Leu Ala Leu Val Lys
 1 5 10 15
 Ser Gln Asp Thr Glu Glu Thr Ile Thr Tyr Thr Gln Cys Thr Asp Gly
 20 25 30
 Tyr Glu Trp Asp Pro Val Arg Gln Gln Cys Lys Asp Ile Asp Glu Cys
 35 40 45
 Asp Ile Val Pro Asp Ala Cys Lys Gly Gly Met Lys Cys Val Asn His
 50 55 60
 Tyr Gly Gly Tyr Leu Cys Leu Pro Lys Thr Ala Gln Ile Ile Val Asn
 65 70 75 80
 Asn Glu Gln Pro Gln Gln Glu Thr Gln Pro Ala Glu Gly Thr Ser Gly
 85 90 95
 Ala Thr Thr Gly Val Val Ala Ala Ser Ser Met Ala Thr Ser Gly Val
 100 105 110
 Leu Pro Gly Gly Gly Phe Val Ala Ser Ala Ala Ala Val Ala Gly Pro
 115 120 125
 Glu Met Gln Thr Gly Arg Asn Asn Phe Val Ile Arg Arg Asn Pro Ala
 130 135 140

```

Asp Pro Gln Arg Ile Pro Ser Asn Pro Ser His Arg Ile Gln Cys Ala
145                               150           155           160
Ala Gly Tyr Glu Gln Ser Glu His Asn Val Cys Gln Asp Ile Asp Glu
                               165           170           175
Cys Thr Ala Gly Thr His Asn Cys Arg Ala Asp Gln Val Cys Ile Asn
                               180           185           190
Leu Arg Gly Ser Phe Ala Cys Gln Cys Pro Pro Gly Tyr Gln Lys Arg
                               195           200           205
Gly Glu Gln Cys Val Asp Ile Asp Glu Cys Thr Ile Pro Pro Tyr Cys
210                               215           220
His Gln Arg Cys Val Asn Thr Pro Gly Ser Phe Tyr Cys Gln Cys Ser
225                               230           235           240
Pro Gly Phe Gln Leu Ala Ala Asn Asn Tyr Thr Cys Val Asp Ile Asn
                               245           250           255
Glu Cys Asp Ala Ser Asn Gln Cys Ala Gln Gln Cys Tyr Asn Ile Leu
260                               265           270
Gly Ser Phe Ile Cys Gln Cys Asn Gln Gly Tyr Glu Leu Ser Ser Asp
275                               280           285
Arg Leu Asn Cys Glu Asp Ile Asp Glu Cys Arg Thr Ser Ser Tyr Leu
290                               295           300
Cys Gln Tyr Gln Cys Val Asn Glu Pro Gly Lys Phe Ser Cys Met Cys
305                               310           315           320
Pro Gln Gly Tyr Gln Val Val Arg Ser Arg Thr Cys Gln Asp Ile Asn
                               325           330           335
Glu Cys Glu Thr Thr Asn Glu Cys Arg Glu Asp Glu Met Cys Trp Asn
340                               345           350
Tyr His Gly Gly Phe Arg Cys Tyr Pro Arg Asn Pro Cys Gln Asp Pro
355                               360           365
Tyr Ile Leu Thr Pro Glu Asn Arg Cys Val Cys Pro Val Ser Asn Ala
370                               375           380
Met Cys Arg Glu Leu Pro Gln Ser Ile Val Tyr Lys Tyr Met Ser Ile
385                               390           395           400
Arg Ser Asp Arg Ser Val Pro Ser Asp Ile Phe Gln Ile Gln Ala Thr
405                               410           415
Thr Ile Tyr Ala Asn Thr Ile Asn Thr Phe Arg Ile Lys Ser Gly Asn
420                               425           430
Glu Asn Gly Glu Phe Tyr Leu Arg Gln Thr Ser Pro Val Ser Ala Met
435                               440           445
Leu Val Leu Val Lys Ser Leu Ser Gly Pro Arg Glu His Ile Val Asp
450                               455           460
Leu Glu Met Leu Thr Val Ser Ser Ile Gly Thr Phe Arg Thr Ser Ser
465                               470           475           480
Val Leu Arg Leu Thr Ile Ile Val Gly Pro Phe Ser Phe
485                               490

```

<210> 75

<211> 646

<212> PRT

<213> Homo sapiens

<400> 75

```

Met Gly Leu Pro Arg Leu Val Cys Ala Phe Leu Leu Ala Ala Cys Cys
1                               5           10           15
Cys Cys Pro Arg Val Ala Gly Val Pro Gly Glu Ala Glu Gln Pro Ala
20                               25           30
Pro Glu Leu Val Glu Val Glu Val Gly Ser Thr Ala Leu Leu Lys Cys
35                               40           45
Gly Leu Ser Gln Ser Gln Gly Asn Leu Ser His Val Asp Trp Phe Ser
50                               55           60
Val His Lys Glu Lys Arg Thr Leu Ile Phe Arg Val Arg Gln Gly Gln
65                               70           75           80

```

[illegible]

Val Ile Val Ala Val Ile Val Cys Ile Leu Val Leu Ala Val Leu Gly
565 570 575
Ala Val Leu Tyr Phe Leu Tyr Lys Lys Gly Lys Leu Pro Cys Arg Arg
580 585 590
Ser Gly Lys Gln Glu Ile Thr Leu Pro Pro Ser Arg Lys Thr Glu Leu
595 600 605
Val Val Glu Val Lys Ser Asp Lys Leu Pro Glu Glu Met Gly Leu Leu
610 615 620
Gln Gly Ser Ser Gly Asp Lys Arg Ala Pro Gly Asp Gln Gly Glu Lys
625 630 635 640
Tyr Ile Asp Leu Arg His
645

<210> 76
<211> 469
<212> PRT
<213> Homo sapiens

<400> 76
Met His Ser Phe Pro Pro Leu Leu Leu Leu Leu Phe Trp Gly Val Val
1 5 10 15
Ser His Ser Phe Pro Ala Thr Leu Glu Thr Gln Glu Gln Asp Val Asp
20 25 30
Leu Val Gln Lys Tyr Leu Glu Lys Tyr Tyr Asn Leu Lys Asn Asp Gly
35 40 45
Arg Gln Val Glu Lys Arg Arg Asn Ser Gly Pro Val Val Glu Lys Leu
50 55 60
Lys Gln Met Gln Glu Phe Phe Gly Leu Lys Val Thr Gly Lys Pro Asp
65 70 75 80
Ala Glu Thr Leu Lys Val Met Lys Gln Pro Arg Cys Gly Val Pro Asp
85 90 95
Val Ala Gln Phe Val Leu Thr Glu Gly Asn Pro Arg Trp Glu Gln Thr
100 105 110
His Leu Thr Tyr Arg Ile Glu Asn Tyr Thr Pro Asp Leu Pro Arg Ala
115 120 125
Asp Val Asp His Ala Ile Glu Lys Ala Phe Gln Leu Trp Ser Asn Val
130 135 140
Thr Pro Leu Thr Phe Thr Lys Val Ser Glu Gly Gln Ala Asp Ile Met
145 150 155 160
Ile Ser Phe Val Arg Gly Asp His Arg Asp Asn Ser Pro Phe Asp Gly
165 170 175
Pro Gly Gly Asn Leu Ala His Ala Phe Gln Pro Gly Pro Gly Ile Gly
180 185 190
Gly Asp Ala His Phe Asp Glu Asp Glu Arg Trp Thr Asn Asn Phe Arg
195 200 205
Glu Tyr Asn Leu His Arg Val Ala Ala His Glu Leu Gly His Ser Leu
210 215 220
Gly Leu Ser His Ser Thr Asp Ile Gly Ala Leu Met Tyr Pro Ser Tyr
225 230 235 240
Thr Phe Ser Gly Asp Val Gln Leu Ala Gln Asp Asp Ile Asp Gly Ile
245 250 255
Gln Ala Ile Tyr Gly Arg Ser Gln Asn Pro Val Gln Pro Ile Gly Pro
260 265 270
Gln Thr Pro Lys Ala Cys Asp Ser Lys Leu Thr Phe Asp Ala Ile Thr
275 280 285
Thr Ile Arg Gly Glu Val Met Phe Phe Lys Asp Arg Phe Tyr Met Arg
290 295 300
Thr Asn Pro Phe Tyr Pro Glu Val Glu Leu Asn Phe Ile Ser Val Phe
305 310 315 320
Trp Pro Gln Leu Pro Asn Gly Leu Glu Ala Ala Tyr Glu Phe Ala Asp
325 330 335

Arg Asp Glu Val Arg Phe Phe Lys Gly Asn Lys Tyr Trp Ala Val Gln
 340 345 350
 Gly Gln Asn Val Leu His Gly Tyr Pro Lys Asp Ile Tyr Ser Ser Phe
 355 360 365
 Gly Phe Pro Arg Thr Val Lys His Ile Asp Ala Ala Leu Ser Glu Glu
 370 375 380
 Asn Thr Gly Lys Thr Tyr Phe Phe Val Ala Asn Lys Tyr Trp Arg Tyr
 385 390 395 400
 Asp Glu Tyr Lys Arg Ser Met Asp Pro Gly Tyr Pro Lys Met Ile Ala
 405 410 415
 His Asp Phe Pro Gly Ile Gly His Lys Val Asp Ala Val Phe Met Lys
 420 425 430
 Asp Gly Phe Phe Tyr Phe Phe His Gly Thr Arg Gln Tyr Lys Phe Asp
 435 440 445
 Pro Lys Thr Lys Arg Ile Leu Thr Leu Gln Lys Ala Asn Ser Trp Phe
 450 455 460
 Asn Cys Arg Lys Asn
 465

<210> 77
 <211> 384
 <212> PRT
 <213> Homo sapiens

<400> 77
 Met Asp Cys Ser Asn Gly Ser Ala Glu Cys Thr Gly Glu Gly Gly Ser
 1 5 10 15
 Lys Glu Val Val Gly Thr Phe Lys Ala Lys Asp Leu Ile Val Thr Pro
 20 25 30
 Ala Thr Ile Leu Lys Glu Lys Pro Asp Pro Asn Asn Leu Val Phe Gly
 35 40 45
 Thr Val Phe Thr Asp His Met Leu Thr Val Glu Trp Ser Ser Glu Phe
 50 55 60
 Gly Trp Glu Lys Pro His Ile Lys Pro Leu Gln Asn Leu Ser Leu His
 65 70 75 80
 Pro Gly Ser Ser Ala Leu His Tyr Ala Val Glu Leu Phe Glu Gly Leu
 85 90 95
 Lys Ala Phe Arg Gly Val Asp Asn Lys Ile Arg Leu Phe Gln Pro Asn
 100 105 110
 Leu Asn Met Asp Arg Met Tyr Arg Ser Ala Val Arg Ala Thr Leu Pro
 115 120 125
 Val Phe Asp Lys Glu Glu Leu Leu Glu Cys Ile Gln Gln Leu Val Lys
 130 135 140
 Leu Asp Gln Glu Trp Val Pro Tyr Ser Thr Ser Ala Ser Leu Tyr Ile
 145 150 155 160
 Arg Pro Ala Phe Ile Gly Thr Glu Pro Ser Leu Gly Val Lys Lys Pro
 165 170 175
 Thr Lys Ala Leu Leu Phe Val Leu Leu Ser Pro Val Gly Pro Tyr Phe
 180 185 190
 Ser Ser Gly Thr Phe Asn Pro Val Ser Leu Trp Ala Asn Pro Lys Tyr
 195 200 205
 Val Arg Ala Trp Lys Gly Gly Thr Gly Asp Cys Lys Met Gly Gly Asn
 210 215 220
 Tyr Gly Ser Ser Leu Phe Ala Gln Cys Glu Asp Val Asp Asn Gly Cys
 225 230 235 240
 Gln Gln Val Leu Trp Leu Tyr Gly Arg Asp His Gln Ile Thr Glu Val
 245 250 255
 Gly Thr Met Asn Leu Phe Leu Tyr Trp Ile Asn Glu Asp Gly Glu Glu
 260 265 270
 Glu Leu Ala Thr Pro Pro Leu Asp Gly Ile Ile Leu Pro Gly Val Thr
 275 280 285

Arg Arg Cys Ile Leu Asp Leu Ala His Gln Trp Gly Glu Phe Lys Val
 290 295 300
 Ser Glu Arg Tyr Leu Thr Met Asp Asp Leu Thr Thr Ala Leu Glu Gly
 305 310 315 320
 Asn Arg Val Arg Glu Met Phe Ser Ser Gly Thr Ala Cys Val Val Cys
 325 330 335
 Pro Val Ser Asp Ile Leu Tyr Lys Gly Glu Thr Ile His Ile Pro Thr
 340 345 350
 Met Glu Asn Gly Pro Lys Leu Ala Ser Arg Ile Leu Ser Lys Leu Thr
 355 360 365
 Asp Ile Gln Tyr Gly Arg Glu Glu Ser Asp Trp Thr Ile Val Leu Ser
 370 375 380

<210> 78
 <211> 381
 <212> PRT
 <213> Homo sapiens

<400> 78
 Met His Leu Leu Ala Ile Leu Phe Cys Ala Leu Trp Ser Ala Val Leu
 1 5 10 15
 Ala Glu Asn Ser Asp Tyr Asp Leu Met Tyr Val Asn Leu Asp Asn
 20 25 30
 Glu Ile Asp Asn Gly Leu His Pro Thr Glu Asp Pro Thr Pro Cys Asp
 35 40 45
 Cys Gly Gln Glu His Ser Glu Trp Asp Lys Leu Phe Ile Met Leu Glu
 50 55 60
 Asn Ser Gln Met Arg Glu Arg Met Leu Leu Gln Ala Thr Asp Asp Val
 65 70 75 80
 Leu Arg Gly Glu Leu Gln Arg Leu Arg Glu Glu Leu Gly Arg Leu Ala
 85 90 95
 Glu Ser Leu Ala Arg Pro Cys Ala Pro Gly Ala Pro Ala Glu Ala Arg
 100 105 110
 Leu Thr Ser Ala Leu Asp Glu Leu Leu Gln Ala Thr Arg Asp Ala Gly
 115 120 125
 Arg Arg Leu Ala Arg Met Glu Gly Ala Glu Ala Gln Arg Pro Glu Glu
 130 135 140
 Ala Gly Arg Ala Leu Ala Val Leu Glu Glu Leu Arg Gln Thr Arg
 145 150 155 160
 Ala Asp Leu His Ala Val Gln Gly Trp Ala Ala Arg Ser Trp Leu Pro
 165 170 175
 Ala Gly Cys Glu Thr Ala Ile Leu Phe Pro Met Arg Ser Lys Lys Ile
 180 185 190
 Phe Gly Ser Val His Pro Val Arg Pro Met Arg Leu Glu Ser Phe Ser
 195 200 205
 Ala Cys Ile Trp Val Lys Ala Thr Asp Val Leu Asn Lys Thr Ile Leu
 210 215 220
 Phe Ser Tyr Gly Thr Lys Arg Asn Pro Tyr Glu Ile Gln Leu Tyr Leu
 225 230 235 240
 Ser Tyr Gln Ser Ile Val Phe Val Val Gly Gly Glu Glu Asn Lys Leu
 245 250 255
 Val Ala Glu Ala Met Val Ser Leu Gly Arg Trp Thr His Leu Cys Gly
 260 265 270 275
 Thr Trp Asn Ser Glu Glu Gly Leu Thr Ser Leu Trp Val Asn Gly Glu
 280 285
 Leu Ala Ala Thr Thr Val Glu Met Ala Thr Gly His Ile Val Pro Glu
 290 295 300
 Gly Gly Ile Leu Gln Ile Gly Gln Glu Lys Asn Gly Cys Cys Val Gly
 305 310 315 320
 Gly Gly Phe Asp Glu Thr Leu Ala Phe Ser Gly Arg Leu Thr Gly Phe
 325 330 335

Asn Ile Trp Asp Ser Val Leu Ser Asn Glu Glu Ile Arg Glu Thr Gly
 340 345 350
 Gly Ala Glu Ser Cys His Ile Arg Gly Asn Ile Val Gly Trp Gly Val
 355 360 365
 Thr Glu Ile Gln Pro His Gly Gly Ala Gln Tyr Val Ser
 370 375 380

<210> 79
 <211> 2813
 <212> PRT
 <213> Homo sapiens

<400> 79
 Met Ile Pro Ala Arg Phe Ala Gly Val Leu Leu Ala Leu Ala Leu Ile
 1 5 10 15
 Leu Pro Gly Thr Leu Cys Ala Glu Gly Thr Arg Gly Arg Ser Ser Thr
 20 25 30
 Ala Arg Cys Ser Leu Phe Gly Ser Asp Phe Val Asn Thr Phe Asp Gly
 35 40 45
 Ser Met Tyr Ser Phe Ala Gly Tyr Cys Ser Tyr Leu Leu Ala Gly Gly
 50 55 60
 Cys Gln Lys Arg Ser Phe Ser Ile Ile Gly Asp Phe Gln Asn Gly Lys
 65 70 75 80
 Arg Val Ser Leu Ser Val Tyr Leu Gly Glu Phe Phe Asp Ile His Leu
 85 90 95
 Phe Val Asn Gly Thr Val Thr Gln Gly Asp Gln Arg Val Ser Met Pro
 100 105 110
 Tyr Ala Ser Lys Gly Leu Tyr Leu Glu Thr Glu Ala Gly Tyr Tyr Lys
 115 120 125
 Leu Ser Gly Glu Ala Tyr Gly Phe Val Ala Arg Ile Asp Gly Ser Gly
 130 135 140
 Asn Phe Gln Val Leu Leu Ser Asp Arg Tyr Phe Asn Lys Thr Cys Gly
 145 150 155 160
 Leu Cys Gly Asn Phe Asn Ile Phe Ala Glu Asp Asp Phe Met Thr Gln
 165 170 175
 Glu Gly Thr Leu Thr Ser Asp Pro Tyr Asp Phe Ala Asn Ser Trp Ala
 180 185 190
 Leu Ser Ser Gly Glu Gln Trp Cys Glu Arg Ala Ser Pro Pro Ser Ser
 195 200 205
 Ser Cys Asn Ile Ser Ser Gly Glu Met Gln Lys Gly Leu Trp Glu Gln
 210 215 220
 Cys Gln Leu Leu Lys Ser Thr Ser Val Phe Ala Arg Cys His Pro Leu
 225 230 235 240
 Val Asp Pro Glu Pro Phe Val Ala Leu Cys Glu Lys Thr Leu Cys Glu
 245 250 255
 Cys Ala Gly Gly Leu Glu Cys Ala Cys Pro Ala Leu Leu Glu Tyr Ala
 260 265 270
 Arg Thr Cys Ala Gln Glu Gly Met Val Leu Tyr Gly Trp Thr Asp His
 275 280 285
 Ser Ala Cys Ser Pro Val Cys Pro Ala Gly Met Glu Tyr Arg Gln Cys
 290 295 300
 Val Ser Pro Cys Ala Arg Thr Cys Gln Ser Leu His Ile Asn Glu Met
 305 310 315 320
 Cys Gln Glu Arg Cys Val Asp Gly Cys Ser Cys Pro Glu Gly Gln Leu
 325 330 335
 Leu Asp Glu Gly Leu Cys Val Glu Ser Thr Glu Cys Pro Cys Val His
 340 345 350
 Ser Gly Lys Arg Tyr Pro Pro Gly Thr Ser Leu Ser Arg Asp Cys Asn
 355 360 365
 Thr Cys Ile Cys Arg Asn Ser Gln Trp Ile Cys Ser Asn Glu Glu Cys
 370 375 380

Pro	Gly	Glu	Cys	Leu	Val	Thr	Gly	Gln	Ser	His	Phe	Lys	Ser	Phe	Asp
385					390					395					400
Asn	Arg	Tyr	Phe	Thr	Phe	Ser	Gly	Ile	Cys	Gln	Tyr	Leu	Leu	Ala	Arg
			405					410						415	
Asp	Cys	Gln	Asp	His	Ser	Phe	Ser	Ile	Val	Ile	Glu	Thr	Val	Gln	Cys
			420					425					430		
Ala	Asp	Asp	Arg	Asp	Ala	Val	Cys	Thr	Arg	Ser	Val	Thr	Val	Arg	Leu
		435				440					445				
Pro	Gly	Leu	His	Asn	Ser	Leu	Val	Lys	Leu	Lys	His	Gly	Ala	Gly	Val
	450				455					460					
Ala	Met	Asp	Gly	Gln	Asp	Ile	Gln	Leu	Pro	Leu	Leu	Lys	Gly	Asp	Leu
	465				470				475						480
Arg	Ile	Gln	His	Thr	Val	Thr	Ala	Ser	Val	Arg	Leu	Ser	Tyr	Gly	Glu
			485					490						495	
Asp	Leu	Gln	Met	Asp	Trp	Asp	Gly	Arg	Gly	Arg	Leu	Leu	Val	Lys	Leu
			500					505					510		
Ser	Pro	Val	Tyr	Ala	Gly	Lys	Thr	Cys	Gly	Leu	Cys	Gly	Asn	Tyr	Asn
		515					520					525			
Gly	Asn	Gln	Gly	Asp	Asp	Phe	Leu	Thr	Pro	Ser	Gly	Leu	Ala	Glu	Pro
	530				535						540				
Arg	Val	Glu	Asp	Phe	Gly	Asn	Ala	Trp	Lys	Leu	His	Gly	Asp	Cys	Gln
	545				550					555					560
Asp	Leu	Gln	Lys	Gln	His	Ser	Asp	Pro	Cys	Ala	Leu	Asn	Pro	Arg	Met
			565					570						575	
Thr	Arg	Phe	Ser	Glu	Glu	Ala	Cys	Ala	Val	Leu	Thr	Ser	Pro	Thr	Phe
			580					585					590		
Glu	Ala	Cys	His	Arg	Ala	Val	Ser	Pro	Leu	Pro	Tyr	Leu	Arg	Asn	Cys
	595					600					605				
Arg	Tyr	Asp	Val	Cys	Ser	Cys	Ser	Asp	Gly	Arg	Glu	Cys	Leu	Cys	Gly
	610					615					620				
Ala	Leu	Ala	Ser	Tyr	Ala	Ala	Ala	Cys	Ala	Gly	Arg	Gly	Val	Arg	Val
	625				630					635					640
Ala	Trp	Arg	Glu	Pro	Gly	Arg	Cys	Glu	Leu	Asn	Cys	Pro	Lys	Gly	Gln
			645					650						655	
Val	Tyr	Leu	Gln	Cys	Gly	Thr	Pro	Cys	Asn	Leu	Thr	Cys	Arg	Ser	Leu
		660						665					670		
Ser	Tyr	Pro	Asp	Glu	Glu	Cys	Asn	Glu	Ala	Cys	Leu	Glu	Gly	Cys	Phe
	675						680					685			
Cys	Pro	Pro	Gly	Leu	Tyr	Met	Asp	Glu	Arg	Gly	Asp	Cys	Val	Pro	Lys
	690					695					700				
Ala	Gln	Cys	Pro	Cys	Tyr	Tyr	Asp	Gly	Glu	Ile	Phe	Gln	Pro	Glu	Asp
	705				710					715					720
Ile	Phe	Ser	Asp	His	His	Thr	Met	Cys	Tyr	Cys	Glu	Asp	Gly	Phe	Met
			725					730						735	
His	Cys	Thr	Met	Ser	Gly	Val	Pro	Gly	Ser	Leu	Leu	Pro	Asp	Ala	Val
			740					745					750		
Leu	Ser	Ser	Pro	Leu	Ser	His	Arg	Ser	Lys	Arg	Ser	Leu	Ser	Cys	Arg
		755				760						765			
Pro	Pro	Met	Val	Lys	Leu	Val	Cys	Pro	Ala	Asp	Asn	Leu	Arg	Ala	Glu
	770					775					780				
Gly	Leu	Glu	Cys	Thr	Lys	Thr	Cys	Gln	Asn	Tyr	Asp	Leu	Glu	Cys	Met
	785				790					795					800
Ser	Met	Gly	Cys	Val	Ser	Gly	Cys	Leu	Cys	Pro	Pro	Gly	Met	Val	Arg
				805					810					815	
His	Glu	Asn	Arg	Cys	Val	Ala	Leu	Glu	Arg	Cys	Pro	Cys	Phe	His	Gln
			820					825					830		
Gly	Lys	Glu	Tyr	Ala	Pro	Gly	Glu	Thr	Val	Lys	Ile	Gly	Cys	Asn	Thr
		835					840					845			
Cys	Val	Cys	Arg	Asp	Arg	Lys	Trp	Asn	Cys	Thr	Asp	His	Val	Cys	Asp
	850					855					860				

Ala Thr Cys Ser Thr Ile Gly Met Ala His Tyr Leu Thr Phe Asp Gly
 865 870 875 880
 Leu Lys Tyr Leu Phe Pro Gly Glu Cys Gln Tyr Val Leu Val Gln Asp
 885 890 895
 Tyr Cys Gly Ser Asn Pro Gly Thr Phe Arg Ile Leu Val Gly Asn Lys
 900 905 910
 Gly Cys Ser His Pro Ser Val Lys Cys Lys Lys Arg Val Thr Ile Leu
 915 920 925
 Val Glu Gly Gly Glu Ile Glu Leu Phe Asp Gly Glu Val Asn Val Lys
 930 935 940
 Arg Pro Met Lys Asp Glu Thr His Phe Glu Val Val Glu Ser Gly Arg
 945 950 955 960
 Tyr Ile Ile Leu Leu Glu Lys Ala Leu Ser Val Val Trp Asp Arg
 965 970 975
 His Leu Ser Ile Ser Val Val Leu Lys Gln Thr Tyr Gln Glu Lys Val
 980 985 990
 Cys Gly Leu Cys Gly Asn Phe Asp Gly Ile Gln Asn Asn Asp Leu Thr
 995 1000 1005
 Ser Ser Asn Leu Gln Val Glu Glu Asp Pro Val Asp Phe Gly Asn Ser
 1010 1015 1020
 Trp Lys Val Ser Ser Gln Cys Ala Asp Thr Arg Lys Val Pro Leu Asp
 1025 1030 1035 1040
 Ser Ser Pro Ala Thr Cys His Asn Asn Ile Met Lys Gln Thr Met Val
 1045 1050 1055
 Asp Ser Ser Cys Arg Ile Leu Thr Ser Asp Val Phe Gln Asp Cys Asn
 1060 1065 1070
 Lys Leu Val Asp Pro Glu Pro Tyr Leu Asp Val Cys Ile Tyr Asp Thr
 1075 1080 1085
 Cys Ser Cys Glu Ser Ile Gly Asp Cys Ala Cys Phe Cys Asp Thr Ile
 1090 1095 1100
 Ala Ala Tyr Ala His Val Cys Ala Gln His Gly Lys Val Val Thr Trp
 1105 1110 1115 1120
 Arg Thr Ala Thr Leu Cys Pro Gln Ser Cys Glu Glu Arg Asn Leu Arg
 1125 1130 1135
 Glu Asn Gly Tyr Glu Cys Glu Trp Arg Tyr Asn Ser Cys Ala Pro Ala
 1140 1145 1150
 Cys Gln Val Thr Cys Gln His Pro Glu Pro Leu Ala Cys Pro Val Gln
 1155 1160 1165
 Cys Val Glu Gly Cys His Ala His Cys Pro Pro Gly Lys Ile Leu Asp
 1170 1175 1180
 Glu Leu Leu Gln Thr Cys Val Asp Pro Glu Asp Cys Pro Val Cys Glu
 1185 1190 1195 1200
 Val Ala Gly Arg Arg Phe Ala Ser Gly Lys Lys Val Thr Leu Asn Pro
 1205 1210 1215
 Ser Asp Pro Glu His Cys Gln Ile Cys His Cys Asp Val Val Asn Leu
 1220 1225 1230
 Thr Cys Glu Ala Cys Gln Glu Pro Gly Gly Leu Val Val Pro Pro Thr
 1235 1240 1245
 Asp Ala Pro Val Ser Pro Thr Thr Leu Tyr Val Glu Asp Ile Ser Glu
 1250 1255 1260
 Pro Pro Leu His Asp Phe Tyr Cys Ser Arg Leu Leu Asp Leu Val Phe
 1265 1270 1275 1280
 Leu Leu Asp Gly Ser Ser Arg Leu Ser Glu Ala Glu Phe Glu Val Leu
 1285 1290 1295
 Lys Ala Phe Val Val Asp Met Met Glu Arg Leu Arg Ile Ser Gln Lys
 1300 1305 1310
 Trp Val Arg Val Ala Val Val Glu Tyr His Asp Gly Ser His Ala Tyr
 1315 1320 1325
 Ile Gly Leu Lys Asp Arg Lys Arg Pro Ser Glu Leu Arg Arg Ile Ala
 1330 1335 1340

Ser Gln Val Lys Tyr Ala Gly Ser Gln Val Ala Ser Thr Ser Glu Val
 1345 1350 1355 1360
 Leu Lys Tyr Thr Leu Phe Gln Ile Phe Ser Lys Ile Asp Arg Pro Glu
 1365 1370 1375
 Ala Ser Arg Ile Ala Leu Leu Leu Met Ala Ser Gln Glu Pro Gln Arg
 1380 1385 1390
 Met Ser Arg Asn Phe Val Arg Tyr Val Gln Gly Leu Lys Lys Lys Lys
 1395 1400 1405
 Val Ile Val Ile Pro Val Gly Ile Gly Pro His Ala Asn Leu Lys Gln
 1410 1415 1420
 Ile Arg Leu Ile Glu Lys Gln Ala Pro Glu Asn Lys Ala Phe Val Leu
 1425 1430 1435 1440
 Ser Ser Val Asp Glu Leu Glu Gln Gln Arg Asp Glu Ile Val Ser Tyr
 1445 1450 1455
 Leu Cys Asp Leu Ala Pro Glu Ala Pro Pro Pro Thr Leu Pro Pro His
 1460 1465 1470
 Met Ala Gln Val Thr Val Gly Pro Gly Leu Leu Gly Val Ser Thr Leu
 1475 1480 1485
 Gly Pro Lys Arg Asn Ser Met Val Leu Asp Val Ala Phe Val Leu Glu
 1490 1495 1500
 Gly Ser Asp Lys Ile Gly Glu Ala Asp Phe Asn Arg Ser Lys Glu Phe
 1505 1510 1515 1520
 Met Glu Glu Val Ile Gln Arg Met Asp Val Gly Gln Asp Ser Ile His
 1525 1530 1535
 Val Thr Val Leu Gln Tyr Ser Tyr Met Val Thr Val Glu Tyr Pro Phe
 1540 1545 1550
 Ser Glu Ala Gln Ser Lys Gly Asp Ile Leu Gln Arg Val Arg Glu Ile
 1555 1560 1565
 Arg Tyr Gln Gly Gly Asn Arg Thr Asn Thr Gly Leu Ala Leu Arg Tyr
 1570 1575 1580
 Leu Ser Asp His Ser Phe Leu Val Ser Gln Gly Asp Arg Glu Gln Ala
 1585 1590 1595 1600
 Pro Asn Leu Val Tyr Met Val Thr Gly Asn Pro Ala Ser Asp Glu Ile
 1605 1610 1615
 Lys Arg Leu Pro Gly Asp Ile Gln Val Val Pro Ile Gly Val Gly Pro
 1620 1625 1630
 Asn Ala Asn Val Gln Glu Leu Glu Arg Ile Gly Trp Pro Asn Ala Pro
 1635 1640 1645
 Ile Leu Ile Gln Asp Phe Glu Thr Leu Pro Arg Glu Ala Pro Asp Leu
 1650 1655 1660
 Val Leu Gln Arg Cys Cys Ser Gly Glu Gly Leu Gln Ile Pro Thr Leu
 1665 1670 1675 1680
 Ser Pro Ala Pro Asp Cys Ser Gln Pro Leu Asp Val Ile Leu Leu Leu
 1685 1690 1695
 Asp Gly Ser Ser Ser Phe Pro Ala Ser Tyr Phe Asp Glu Met Lys Ser
 1700 1705 1710
 Phe Ala Lys Ala Phe Ile Ser Lys Ala Asn Ile Gly Pro Arg Leu Thr
 1715 1720 1725
 Gln Val Ser Val Leu Gln Tyr Gly Ser Ile Thr Thr Ile Asp Val Pro
 1730 1735 1740
 Trp Asn Val Val Pro Glu Lys Ala His Leu Leu Ser Leu Val Asp Val
 1745 1750 1755 1760
 Met Gln Arg Glu Gly Gly Pro Ser Gln Ile Gly Asp Ala Leu Gly Phe
 1765 1770 1775
 Ala Val Arg Tyr Leu Thr Ser Glu Met His Gly Ala Arg Pro Gly Ala
 1780 1785 1790
 Ser Lys Ala Val Val Ile Leu Val Thr Asp Val Ser Val Asp Ser Val
 1795 1800 1805
 Asp Ala Ala Ala Asp Ala Ala Arg Ser Asn Arg Val Thr Val Phe Pro
 1810 1815 1820

Ile Gly Ile Gly Asp Arg Tyr Asp Ala Ala Gln Leu Arg Ile Leu Ala
 1825 1830 1835 1840
 Gly Pro Ala Gly Asp Ser Asn Val Val Lys Leu Gln Arg Ile Glu Asp
 1845 1850 1855
 Leu Pro Thr Met Val Thr Leu Gly Asn Ser Phe Leu His Lys Leu Cys
 1860 1865 1870
 Ser Gly Phe Val Arg Ile Cys Met Asp Glu Asp Gly Asn Glu Lys Arg
 1875 1880 1885
 Pro Gly Asp Val Trp Thr Leu Pro Asp Gln Cys His Thr Val Thr Cys
 1890 1895 1900
 Gln Pro Asp Gly Gln Thr Leu Leu Lys Ser His Arg Val Asn Cys Asp
 1905 1910 1915 1920
 Arg Gly Leu Arg Pro Ser Cys Pro Asn Ser Gln Ser Pro Val Lys Val
 1925 1930 1935
 Glu Glu Thr Cys Gly Cys Arg Trp Thr Cys Pro Cys Val Cys Thr Gly
 1940 1945 1950
 Ser Ser Thr Arg His Ile Val Thr Phe Asp Gly Gln Asn Phe Lys Leu
 1955 1960 1965
 Thr Gly Ser Cys Ser Tyr Val Leu Phe Gln Asn Lys Glu Gln Asp Leu
 1970 1975 1980
 Glu Val Ile Leu His Asn Gly Ala Cys Ser Pro Gly Ala Arg Gln Gly
 1985 1990 1995 2000
 Cys Met Lys Ser Ile Glu Val Lys His Ser Ala Leu Ser Val Glu Leu
 2005 2010 2015
 His Ser Asp Met Glu Val Thr Val Asn Gly Arg Leu Val Ser Val Pro
 2020 2025 2030
 Tyr Val Gly Gly Asn Met Glu Val Asn Val Tyr Gly Ala Ile Met His
 2035 2040 2045
 Glu Val Arg Phe Asn His Leu Gly His Ile Phe Thr Phe Thr Pro Gln
 2050 2055 2060
 Asn Asn Glu Phe Gln Leu Gln Leu Ser Pro Lys Thr Phe Ala Ser Lys
 2065 2070 2075 2080
 Thr Tyr Gly Leu Cys Gly Ile Cys Asp Glu Asn Gly Ala Asn Asp Phe
 2085 2090 2095
 Met Leu Arg Asp Gly Thr Val Thr Thr Asp Trp Lys Thr Leu Val Gln
 2100 2105 2110
 Glu Trp Thr Val Gln Arg Pro Gly Gln Thr Cys Gln Pro Ile Leu Glu
 2115 2120 2125
 Glu Gln Cys Leu Val Pro Asp Ser Ser His Cys Gln Val Leu Leu Leu
 2130 2135 2140
 Pro Leu Phe Ala Glu Cys His Lys Val Leu Ala Pro Ala Thr Phe Tyr
 2145 2150 2155 2160
 Ala Ile Cys Gln Gln Asp Ser Cys His Gln Glu Gln Val Cys Glu Val
 2165 2170 2175
 Ile Ala Ser Tyr Ala His Leu Cys Arg Thr Asn Gly Val Cys Val Asp
 2180 2185 2190
 Trp Arg Thr Pro Asp Phe Cys Ala Met Ser Cys Pro Pro Ser Leu Val
 2195 2200 2205
 Tyr Asn His Cys Glu His Gly Cys Pro Arg His Cys Asp Gly Asn Val
 2210 2215 2220
 Ser Ser Cys Gly Asp His Pro Ser Glu Gly Cys Phe Cys Pro Pro Asp
 2225 2230 2235 2240
 Lys Val Met Leu Glu Gly Ser Cys Val Pro Glu Glu Ala Cys Thr Gln
 2245 2250 2255
 Cys Ile Gly Glu Asp Gly Val Gln His Gln Phe Leu Glu Ala Trp Val
 2260 2265 2270
 Pro Asp His Gln Pro Cys Gln Ile Cys Thr Cys Leu Ser Gly Arg Lys
 2275 2280 2285
 Val Asn Cys Thr Thr Gln Pro Cys Pro Thr Ala Lys Ala Pro Thr Cys
 2290 2295 2300

Gly Leu Cys Glu Val Ala Arg Leu Arg Gln Asn Ala Asp Gln Cys Cys
 2305 2310 2315 2320
 Pro Glu Tyr Glu Cys Val Cys Asp Pro Val Ser Cys Asp Leu Pro Pro
 2325 2330 2335
 Val Pro His Cys Glu Arg Gly Leu Gln Pro Thr Leu Thr Asn Pro Gly
 2340 2345 2350
 Glu Cys Arg Pro Asn Phe Thr Cys Ala Cys Arg Lys Glu Cys Lys
 2355 2360 2365
 Arg Val Ser Pro Pro Ser Cys Pro Pro His Arg Leu Pro Thr Leu Arg
 2370 2375 2380
 Lys Thr Gln Cys Cys Asp Glu Tyr Glu Cys Ala Cys Asn Cys Val Asn
 2385 2390 2395 2400
 Ser Thr Val Ser Cys Pro Leu Gly Tyr Leu Ala Ser Thr Ala Thr Asn
 2405 2410 2415
 Asp Cys Gly Cys Thr Thr Thr Thr Cys Leu Pro Asp Lys Val Cys Val
 2420 2425 2430
 His Arg Ser Thr Ile Tyr Pro Val Gly Gln Phe Trp Glu Glu Gly Cys
 2435 2440 2445
 Asp Val Cys Thr Cys Thr Asp Met Glu Asp Ala Val Met Gly Leu Arg
 2450 2455 2460
 Val Ala Gln Cys Ser Gln Lys Pro Cys Glu Asp Ser Cys Arg Ser Gly
 2465 2470 2475 2480
 Phe Thr Tyr Val Leu His Glu Gly Glu Cys Cys Gly Arg Cys Leu Pro
 2485 2490 2495
 Ser Ala Cys Glu Val Val Thr Gly Ser Pro Arg Gly Asp Ser Gln Ser
 2500 2505 2510
 Ser Trp Lys Ser Val Gly Ser Gln Trp Ala Ser Pro Glu Asn Pro Cys
 2515 2520 2525
 Leu Ile Asn Glu Cys Val Arg Val Lys Glu Glu Val Phe Ile Gln Gln
 2530 2535 2540
 Arg Asn Val Ser Cys Pro Gln Leu Glu Val Pro Val Cys Pro Ser Gly
 2545 2550 2555 2560
 Phe Gln Leu Ser Cys Lys Thr Ser Ala Cys Cys Pro Ser Cys Arg Cys
 2565 2570 2575
 Glu Arg Met Glu Ala Cys Met Leu Asn Gly Thr Val Ile Gly Pro Gly
 2580 2585 2590
 Lys Thr Val Met Ile Asp Val Cys Thr Thr Cys Arg Cys Met Val Gln
 2595 2600 2605
 Val Gly Val Ile Ser Gly Phe Lys Leu Glu Cys Arg Lys Thr Thr Cys
 2610 2615 2620
 Asn Pro Cys Pro Leu Gly Tyr Lys Glu Glu Asn Asn Thr Gly Glu Cys
 2625 2630 2635 2640
 Cys Gly Arg Cys Leu Pro Thr Ala Cys Thr Ile Gln Leu Arg Gly Gly
 2645 2650 2655
 Gln Ile Met Thr Leu Lys Arg Asp Glu Thr Leu Gln Asp Gly Cys Asp
 2660 2665 2670
 Thr His Phe Cys Lys Val Asn Glu Arg Gly Glu Tyr Phe Trp Glu Lys
 2675 2680 2685
 Arg Val Thr Gly Cys Pro Pro Phe Asp Glu His Lys Cys Leu Ala Glu
 2690 2695 2700
 Gly Gly Lys Ile Met Lys Ile Pro Gly Thr Cys Cys Asp Thr Cys Glu
 2705 2710 2715 2720
 Glu Pro Glu Cys Asn Asp Ile Thr Ala Arg Leu Gln Tyr Val Lys Val
 2725 2730 2735
 Gly Ser Cys Lys Ser Glu Val Glu Val Asp Ile His Tyr Cys Gln Gly
 2740 2745 2750
 Lys Cys Ala Ser Lys Ala Met Tyr Ser Ile Asp Ile Asn Asp Val Gln
 2755 2760 2765
 Asp Gln Cys Ser Cys Cys Ser Pro Thr Arg Thr Glu Pro Met Gln Val
 2770 2775 2780

Ala Leu His Cys Thr Asn Gly Ser Val Val Tyr His Glu Val Leu Asn
 2785 2790 2795 2800
 Ala Met Glu Cys Lys Cys Ser Pro Arg Lys Cys Ser Lys
 2805 2810

<210> 80
 <211> 1039
 <212> PRT
 <213> Homo sapiens

<400> 80
 Met Ala Val Gln Leu Val Pro Asp Ser Ala Leu Gly Leu Leu Met Met
 1 5 10 15
 Thr Glu Gly Arg Arg Cys Gln Val His Leu Leu Asp Asp Arg Lys Leu
 20 25 30
 Glu Leu Leu Val Gln Pro Lys Leu Leu Ala Lys Glu Leu Leu Asp Leu
 35 40 45
 Val Ala Ser His Phe Asn Leu Lys Glu Lys Glu Tyr Phe Gly Ile Ala
 50 55 60
 Phe Thr Asp Glu Thr Gly His Leu Asn Trp Leu Gln Leu Asp Arg Arg
 65 70 75 80
 Val Leu Glu His Asp Phe Pro Lys Lys Ser Gly Pro Val Val Leu Tyr
 85 90 95
 Phe Cys Val Arg Phe Tyr Ile Glu Ser Ile Ser Tyr Leu Lys Asp Asn
 100 105 110
 Ala Thr Ile Glu Leu Phe Phe Leu Asn Ala Lys Ser Cys Ile Tyr Lys
 115 120 125
 Glu Leu Ile Asp Val Asp Ser Glu Val Val Phe Glu Leu Ala Ser Tyr
 130 135 140
 Ile Leu Gln Glu Ala Lys Gly Asp Phe Ser Ser Asn Glu Val Val Arg
 145 150 155 160
 Ser Asp Leu Lys Lys Leu Pro Ala Leu Pro Thr Gln Ala Leu Lys Glu
 165 170 175
 His Pro Ser Leu Ala Tyr Cys Glu Asp Arg Val Ile Glu His Tyr Lys
 180 185 190
 Lys Leu Asn Gly Gln Thr Arg Gly Gln Ala Ile Val Asn Tyr Met Ser
 195 200 205
 Ile Val Glu Ser Leu Pro Thr Tyr Gly Val His Tyr Tyr Ala Val Lys
 210 215 220
 Asp Lys Gln Gly Ile Pro Trp Trp Leu Gly Leu Ser Tyr Lys Gly Ile
 225 230 235 240
 Phe Gln Tyr Asp Tyr His Asp Lys Val Lys Pro Arg Lys Ile Phe Gln
 245 250 255
 Trp Arg Gln Leu Glu Asn Leu Tyr Phe Arg Glu Lys Lys Phe Ser Val
 260 265 270
 Glu Val His Asp Pro Arg Arg Ala Ser Val Thr Arg Arg Thr Phe Gly
 275 280 285
 His Ser Gly Ile Ala Val His Thr Trp Tyr Ala Cys Pro Ala Leu Ile
 290 295 300
 Lys Ser Ile Trp Ala Met Ala Ile Ser Gln His Gln Phe Tyr Leu Asp
 305 310 315 320
 Arg Lys Gln Ser Lys Ser Lys Ile His Ala Ala Arg Ser Leu Ser Glu
 325 330 335
 Ile Ala Ile Asp Leu Thr Glu Thr Gly Thr Leu Lys Thr Ser Lys Leu
 340 345 350
 Ala Asn Met Gly Ser Lys Gly Lys Ile Ile Ser Gly Ser Ser Gly Ser
 355 360 365
 Leu Leu Ser Ser Gly Ser Gln Glu Ser Asp Ser Ser Gln Ser Ala Lys
 370 375 380
 Lys Asp Met Leu Ala Ala Leu Lys Ser Arg Gln Glu Ala Leu Glu Glu
 385 390 395 400

Thr	Leu	Arg	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Lys	Leu	Cys	Leu	Arg	Glu	
			405						410					415		
Ala	Glu	Leu	Thr	Gly	Lys	Leu	Pro	Val	Glu	Tyr	Pro	Leu	Asp	Pro	Gly	
			420					425					430			
Glu	Glu	Pro	Pro	Ile	Val	Arg	Arg	Arg	Ile	Gly	Thr	Ala	Phe	Lys	Leu	
		435					440					445				
Asp	Glu	Gln	Lys	Ile	Leu	Pro	Lys	Gly	Glu	Glu	Ala	Glu	Leu	Glu	Arg	
	450				455						460					
Leu	Glu	Arg	Glu	Phe	Ala	Ile	Gln	Ser	Gln	Ile	Thr	Glu	Ala	Ala	Arg	
465				470					475						480	
Arg	Leu	Ala	Ser	Asp	Pro	Asn	Val	Ser	Lys	Lys	Leu	Lys	Lys	Gln	Arg	
			485					490						495		
Lys	Thr	Ser	Tyr	Leu	Asn	Ala	Leu	Lys	Lys	Leu	Gln	Glu	Ile	Glu	Asn	
			500				505						510			
Ala	Ile	Asn	Glu	Asn	Arg	Ile	Lys	Ser	Gly	Lys	Lys	Pro	Thr	Gln	Arg	
		515				520						525				
Ala	Ser	Leu	Ile	Ile	Asp	Asp	Gly	Asn	Ile	Ala	Ser	Glu	Asp	Ser	Ser	
	530				535						540					
Leu	Ser	Asp	Ala	Leu	Val	Leu	Glu	Asp	Glu	Asp	Ser	Gln	Val	Thr	Ser	
545				550					555						560	
Thr	Ile	Ser	Pro	Leu	His	Ser	Pro	His	Lys	Gly	Leu	Pro	Pro	Arg	Pro	
			565					570						575		
Pro	Ser	His	Asn	Arg	Pro	Pro	Pro	Pro	Gln	Ser	Leu	Glu	Gly	Leu	Arg	
		580					585						590			
Gln	Met	His	Tyr	His	Arg	Asn	Asp	Tyr	Asp	Lys	Ser	Pro	Ile	Lys	Pro	
	595					600						605				
Lys	Met	Trp	Ser	Glu	Ser	Ser	Leu	Asp	Glu	Pro	Tyr	Glu	Lys	Val	Lys	
	610				615						620					
Lys	Arg	Ser	Ser	His	Ser	His	Ser	Ser	Ser	His	Lys	Arg	Phe	Pro	Ser	
625				630						635					640	
Thr	Gly	Ser	Cys	Ala	Glu	Ala	Gly	Gly	Gly	Ser	Asn	Ser	Leu	Gln	Asn	
			645					650						655		
Ser	Pro	Ile	Arg	Gly	Leu	Pro	His	Trp	Asn	Ser	Gln	Ser	Ser	Met	Pro	
		660				665						670				
Ser	Thr	Pro	Asp	Leu	Arg	Val	Arg	Ser	Pro	His	Tyr	Val	His	Ser	Thr	
	675					680						685				
Arg	Ser	Val	Asp	Ile	Ser	Pro	Thr	Arg	Leu	His	Ser	Leu	Ala	Leu	His	
	690				695						700					
Phe	Arg	His	Arg	Ser	Ser	Ser	Leu	Glu	Ser	Gln	Gly	Lys	Leu	Leu	Gly	
705				710						715					720	
Ser	Glu	Asn	Asp	Thr	Gly	Ser	Pro	Asp	Phe	Tyr	Thr	Pro	Arg	Thr	Arg	
			725					730						735		
Ser	Ser	Asn	Gly	Ser	Asp	Pro	Met	Asp	Asp	Cys	Ser	Ser	Cys	Thr	Ser	
	740						745						750			
His	Ser	Ser	Ser	Glu	His	Tyr	Tyr	Pro	Ala	Gln	Met	Asn	Ala	Asn	Tyr	
	755					760						765				
Ser	Thr	Leu	Ala	Glu	Asp	Ser	Pro	Ser	Lys	Ala	Arg	Gln	Arg	Gln	Arg	
	770				775						780					
Gln	Arg	Gln	Arg	Ala	Ala	Gly	Ala	Leu	Gly	Ser	Ala	Ser	Ser	Gly	Ser	
785				790						795					800	
Met	Pro	Asn	Leu	Ala	Ala	Arg	Gly	Gly	Ala	Gly	Gly	Ala	Gly	Gly	Ala	
			805					810						815		
Gly	Gly	Gly	Val	Tyr	Leu	His	Ser	Gln	Ser	Gln	Pro	Ser	Ser	Gln	Tyr	
			820				825						830			
Arg	Ile	Lys	Glu	Tyr	Pro	Leu	Tyr	Ile	Glu	Gly	Gly	Ala	Thr	Pro	Val	
	835					840						845				
Val	Val	Arg	Ser	Leu	Glu	Ser	Asp	Gln	Glu	Cys	His	Tyr	Ser	Val	Lys	
	850				855						860					
Ala	Gln	Phe	Lys	Thr	Ser	Asn	Ser	Tyr	Thr	Ala	Gly	Gly	Leu	Phe	Lys	
865					870					875					880	

Glu Ser Trp Arg Gly Gly Gly Gly Asp Glu Gly Asp Thr Gly Arg Leu
885 890 895
Thr Pro Ser Arg Ser Gln Ile Leu Arg Thr Pro Ser Leu Gly Arg Glu
900 905 910
Gly Ala His Asp Lys Gly Ala Gly Arg Ala Ala Val Ser Asp Glu Leu
915 920 925
Arg Gln Trp Tyr Gln Arg Ser Thr Ala Ser His Lys Glu His Ser Arg
930 935 940
Leu Ser His Thr Ser Ser Thr Ser Ser Asp Ser Gly Ser Gln Tyr Ser
945 950 955 960
Thr Ser Ser Gln Ser Thr Phe Val Ala His Ser Arg Val Thr Arg Met
965 970 975
Pro Gln Met Cys Lys Ala Thr Ser Ala Ala Leu Pro Gln Ser Gln Arg
980 985 990
Ser Ser Thr Pro Ser Ser Glu Ile Gly Ala Thr Pro Pro Ser Ser Pro
995 1000 1005
His His Ile Leu Thr Trp Gln Thr Gly Glu Ala Thr Glu Asn Ser Pro
1010 1015 1020
Ile Leu Asp Gly Ser Glu Ser Pro Pro His Gln Ser Thr Asp Glu
1025 1030 1035

<210> 81
<211> 748
<212> PRT
<213> Homo sapiens

<400> 81
Met Ser Asn Pro Gly Gly Arg Arg Asn Gly Pro Val Lys Leu Arg Leu
1 5 10 15
Thr Val Leu Cys Ala Lys Asn Leu Val Lys Lys Asp Phe Phe Arg Leu
20 25 30
Pro Asp Pro Phe Ala Lys Val Val Val Asp Gly Ser Gly Gln Cys His
35 40 45
Ser Thr Asp Thr Val Lys Asn Thr Leu Asp Pro Lys Trp Asn Gln His
50 55 60
Tyr Asp Leu Tyr Ile Gly Lys Ser Asp Ser Val Thr Ile Ser Val Trp
65 70 75 80
Asn His Lys Lys Ile His Lys Lys Gln Gly Ala Gly Phe Leu Gly Cys
85 90 95
Val Arg Leu Leu Ser Asn Ala Ile Asn Arg Leu Lys Asp Thr Gly Tyr
100 105 110
Gln Arg Leu Asp Leu Cys Lys Leu Gly Pro Asn Asp Asn Asp Thr Val
115 120 125
Arg Gly Gln Ile Val Val Ser Leu Gln Ser Arg Asp Arg Ile Gly Thr
130 135 140
Gly Gly Gln Val Val Asp Cys Ser Arg Leu Phe Asp Asn Asp Leu Pro
145 150 155 160
Asp Gly Trp Glu Glu Arg Arg Thr Ala Ser Gly Arg Ile Gln Tyr Leu
165 170 175
Asn His Ile Thr Arg Thr Thr Gln Trp Glu Arg Pro Thr Arg Pro Ala
180 185 190
Ser Glu Tyr Ser Ser Pro Gly Arg Pro Leu Ser Cys Phe Val Asp Glu
195 200 205
Asn Thr Pro Ile Ser Gly Thr Asn Gly Ala Thr Cys Gly Gln Ser Ser
210 215 220
Asp Pro Arg Leu Ala Glu Arg Arg Val Arg Ser Gln Arg His Arg Asn
225 230 235 240
Tyr Met Ser Arg Thr His Leu His Thr Pro Pro Asp Leu Pro Glu Gly
245 250 255
Tyr Glu Gln Arg Thr Thr Gln Gln Gly Gln Val Tyr Phe Leu His Thr
260 265 270

Gln	Thr	Gly	Val	Ser	Thr	Trp	His	Asp	Pro	Arg	Val	Pro	Arg	Asp	Leu
		275					280					285			
Ser	Asn	Ile	Asn	Cys	Glu	Glu	Leu	Gly	Pro	Leu	Pro	Pro	Gly	Trp	Glu
	290				295					300					
Ile	Arg	Asn	Thr	Ala	Thr	Gly	Arg	Val	Tyr	Phe	Val	Asp	His	Asn	Asn
305				310						315					320
Arg	Thr	Thr	Gln	Phe	Thr	Asp	Pro	Arg	Leu	Ser	Ala	Asn	Leu	His	Leu
			325						330					335	
Val	Leu	Asn	Arg	Gln	Asn	Gln	Leu	Lys	Asp	Gln	Gln	Gln	Gln	Gln	Val
		340						345					350		
Val	Ser	Leu	Cys	Pro	Asp	Asp	Thr	Glu	Cys	Leu	Thr	Val	Pro	Arg	Tyr
		355					360					365			
Lys	Arg	Asp	Leu	Val	Gln	Lys	Leu	Lys	Ile	Leu	Arg	Gln	Glu	Leu	Ser
	370				375						380				
Gln	Gln	Gln	Pro	Gln	Ala	Gly	His	Cys	Arg	Ile	Glu	Val	Ser	Arg	Glu
385					390					395					400
Glu	Ile	Phe	Glu	Glu	Ser	Tyr	Arg	Gln	Val	Met	Lys	Met	Arg	Pro	Lys
			405						410					415	
Asp	Leu	Trp	Lys	Arg	Leu	Met	Ile	Lys	Phe	Arg	Gly	Glu	Glu	Gly	Leu
		420						425					430		
Asp	Tyr	Gly	Gly	Val	Ala	Arg	Glu	Trp	Leu	Tyr	Leu	Leu	Ser	His	Glu
	435						440					445			
Met	Leu	Asn	Pro	Tyr	Tyr	Gly	Leu	Phe	Gln	Tyr	Ser	Arg	Asp	Asp	Ile
	450					455					460				
Tyr	Thr	Leu	Gln	Ile	Asn	Pro	Asp	Ser	Ala	Val	Asn	Pro	Glu	His	Leu
465				470					475						480
Ser	Tyr	Phe	His	Phe	Val	Gly	Arg	Ile	Met	Gly	Met	Ala	Val	Phe	His
			485						490					495	
Gly	His	Tyr	Ile	Asp	Gly	Gly	Phe	Thr	Leu	Pro	Phe	Tyr	Lys	Gln	Leu
		500					505						510		
Leu	Gly	Lys	Ser	Ile	Thr	Leu	Asp	Asp	Met	Glu	Leu	Val	Asp	Pro	Asp
	515					520						525			
Leu	His	Asn	Ser	Leu	Val	Trp	Ile	Leu	Glu	Asn	Asp	Ile	Thr	Gly	Val
	530					535					540				
Leu	Asp	His	Thr	Phe	Cys	Val	Glu	His	Asn	Ala	Tyr	Gly	Glu	Ile	Ile
545				550						555					560
Gln	His	Glu	Leu	Lys	Pro	Asn	Gly	Lys	Ser	Ile	Pro	Val	Asn	Glu	Glu
			565						570					575	
Asn	Lys	Lys	Glu	Tyr	Val	Arg	Leu	Tyr	Val	Asn	Trp	Arg	Phe	Leu	Arg
	580							585					590		
Gly	Ile	Glu	Ala	Gln	Phe	Leu	Ala	Leu	Gln	Lys	Gly	Phe	Asn	Glu	Val
	595					600						605			
Ile	Pro	Gln	His	Leu	Leu	Lys	Thr	Phe	Asp	Glu	Lys	Glu	Leu	Glu	Leu
	610					615					620				
Ile	Ile	Cys	Gly	Leu	Gly	Lys	Ile	Asp	Val	Asn	Asp	Trp	Lys	Val	Asn
625				630						635					640
Thr	Arg	Leu	Lys	His	Cys	Thr	Pro	Asp	Ser	Asn	Ile	Val	Lys	Trp	Phe
			645						650					655	
Trp	Lys	Ala	Val	Glu	Phe	Phe	Asp	Glu	Glu	Arg	Arg	Ala	Arg	Leu	Leu
		660						665					670		
Gln	Phe	Val	Thr	Gly	Ser	Ser	Arg	Val	Pro	Leu	Gln	Gly	Phe	Lys	Ala
	675						680					685			
Leu	Gln	Gly	Ala	Ala	Gly	Pro	Arg	Leu	Phe	Thr	Ile	His	Gln	Ile	Asp
	690					695					700				
Ala	Cys	Thr	Asn	Asn	Leu	Pro	Lys	Ala	His	Thr	Cys	Phe	Asn	Arg	Ile
705				710						715					720
Asp	Ile	Pro	Pro	Tyr	Glu	Ser	Tyr	Glu	Lys	Leu	Tyr	Glu	Lys	Leu	Leu
			725					730						735	
Thr	Ala	Ile	Glu	Glu	Thr	Cys	Gly	Phe	Ala	Val	Glu				
			740					745							

<210> 82
 <211> 199
 <212> PRT
 <213> Homo sapiens

<400> 82
 Pro Leu Trp Thr Glu Pro Pro Leu Ser Cys Cys Leu Pro Ala Thr Tyr
 1 5 10 15
 Pro Ala Asp Arg Gly Pro Ala Glu Pro Cys Ser Cys Ala Gly Val Ile
 20 25 30
 Leu Gly Phe Leu Leu Phe Arg Gly His Asn Ser Gln Pro Thr Met Thr
 35 40 45
 Gln Thr Ser Ser Ser Gln Gly Gly Leu Gly Gly Leu Ser Leu Thr Thr
 50 55 60
 Glu Pro Val Ser Ser Asn Pro Gly Tyr Ile Pro Ser Ser Glu Ala Asn
 65 70 75 80
 Arg Pro Ser His Leu Ser Ser Thr Gly Thr Pro Gly Ala Gly Val Pro
 85 90 95
 Ser Ser Gly Arg Asp Gly Gly Thr Ser Arg Asp Thr Phe Gln Thr Val
 100 105 110
 Pro Pro Asn Ser Thr Thr Met Ser Leu Ser Met Arg Glu Asp Ala Thr
 115 120 125
 Ile Leu Pro Ser Pro Thr Ser Glu Thr Val Leu Thr Val Ala Ala Phe
 130 135 140
 Gly Val Ile Ser Phe Ile Val Ile Leu Val Val Val Val Ile Ile Leu
 145 150 155 160
 Val Gly Val Val Ser Leu Arg Phe Lys Cys Arg Lys Ser Lys Glu Ser
 165 170 175
 Gly Asp Pro Gln Lys Pro Gly Glu Arg Glu Glu Lys Val Gly His Arg
 180 185 190
 Arg Glu Pro Tyr Pro Trp Asn
 195

<210> 83
 <211> 652
 <212> PRT
 <213> Homo sapiens

<400> 83
 Met Ala Thr Ser Met Gly Leu Leu Leu Leu Leu Leu Leu Thr
 1 5 10 15
 Gln Pro Gly Ala Gly Thr Gly Ala Asp Thr Glu Ala Val Val Cys Val
 20 25 30
 Gly Thr Ala Cys Tyr Thr Ala His Ser Gly Lys Leu Ser Ala Ala Glu
 35 40 45
 Ala Gln Asn His Cys Asn Gln Asn Gly Gly Asn Leu Ala Thr Val Lys
 50 55 60
 Ser Lys Glu Glu Ala Gln His Val Gln Arg Val Leu Ala Gln Leu Leu
 65 70 75 80
 Arg Arg Glu Ala Ala Leu Thr Ala Arg Met Ser Lys Phe Trp Ile Gly
 85 90 95
 Leu Gln Arg Glu Lys Gly Lys Cys Leu Asp Pro Ser Leu Pro Leu Lys
 100 105 110
 Gly Phe Ser Trp Val Gly Gly Gly Glu Asp Thr Pro Tyr Ser Asn Trp
 115 120 125
 His Lys Glu Leu Arg Asn Ser Cys Ile Ser Lys Arg Cys Val Ser Leu
 130 135 140
 Leu Leu Asp Leu Ser Gln Pro Leu Leu Pro Asn Arg Leu Pro Lys Trp
 145 150 155 160
 Ser Glu Gly Pro Cys Gly Ser Pro Gly Ser Pro Gly Ser Asn Ile Glu
 165 170 175

Gly	Phe	Val	Cys	Lys	Phe	Ser	Phe	Lys	Gly	Met	Cys	Arg	Pro	Leu	Ala	
			180					185					190			
Leu	Gly	Gly	Pro	Gly	Gln	Val	Thr	Tyr	Thr	Thr	Pro	Phe	Gln	Thr	Thr	
		195					200					205				
Ser	Ser	Ser	Leu	Glu	Ala	Val	Pro	Phe	Ala	Ser	Ala	Ala	Asn	Val	Ala	
		210					215				220					
Cys	Gly	Glu	Gly	Asp	Lys	Asp	Glu	Thr	Gln	Ser	His	Tyr	Phe	Leu	Cys	
225					230					235					240	
Lys	Glu	Lys	Ala	Pro	Asp	Val	Phe	Asp	Trp	Gly	Ser	Ser	Gly	Pro	Leu	
				245					250					255		
Cys	Val	Ser	Pro	Lys	Tyr	Gly	Cys	Asn	Phe	Asn	Asn	Gly	Gly	Cys	His	
			260					265					270			
Gln	Asp	Cys	Phe	Glu	Gly	Gly	Asp	Gly	Ser	Phe	Leu	Cys	Gly	Cys	Arg	
		275					280					285				
Pro	Gly	Phe	Arg	Leu	Leu	Asp	Asp	Leu	Val	Thr	Cys	Ala	Ser	Arg	Asn	
		290					295					300				
Pro	Cys	Ser	Ser	Ser	Pro	Cys	Arg	Gly	Gly	Ala	Thr	Cys	Val	Leu	Gly	
305					310					315					320	
Pro	His	Gly	Lys	Asn	Tyr	Thr	Cys	Arg	Cys	Pro	Gln	Gly	Tyr	Gln	Leu	
				325					330					335		
Asp	Ser	Ser	Gln	Leu	Asp	Cys	Val	Asp	Val	Asp	Glu	Cys	Gln	Asp	Ser	
			340					345					350			
Pro	Cys	Ala	Gln	Glu	Cys	Val	Asn	Thr	Pro	Gly	Gly	Phe	Arg	Cys	Glu	
		355					360					365				
Cys	Trp	Val	Gly	Tyr	Glu	Pro	Gly	Gly	Pro	Gly	Glu	Gly	Ala	Cys	Gln	
		370				375					380					
Asp	Val	Asp	Glu	Cys	Ala	Leu	Gly	Arg	Ser	Pro	Cys	Ala	Gln	Gly	Cys	
385					390					395					400	
Thr	Asn	Thr	Asp	Gly	Ser	Phe	His	Cys	Ser	Cys	Glu	Glu	Gly	Tyr	Val	
				405					410					415		
Leu	Ala	Gly	Glu	Asp	Gly	Thr	Gln	Cys	Gln	Asp	Val	Asp	Glu	Cys	Val	
			420					425					430			
Gly	Pro	Gly	Gly	Pro	Leu	Cys	Asp	Ser	Leu	Cys	Phe	Asn	Thr	Gln	Gly	
		435					440					445				
Ser	Phe	His	Cys	Gly	Cys	Leu	Pro	Gly	Trp	Val	Leu	Ala	Pro	Asn	Gly	
		450				455					460					
Val	Ser	Cys	Thr	Met	Gly	Pro	Val	Ser	Leu	Gly	Pro	Pro	Ser	Gly	Pro	
465					470					475					480	
Pro	Asp	Glu	Glu	Asp	Lys	Gly	Glu	Lys	Glu	Gly	Ser	Thr	Val	Pro	Arg	
				485					490					495		
Ala	Ala	Thr	Ala	Ser	Pro	Thr	Arg	Gly	Pro	Glu	Gly	Thr	Pro	Lys	Ala	
			500					505					510			
Thr	Pro	Thr	Ser	Arg	Pro	Ser	Leu	Ser	Ser	Asp	Ala	Pro	Ile	Thr		
		515				520					525					
Ser	Ala	Pro	Leu	Lys	Met	Leu	Ala	Pro	Ser	Gly	Ser	Ser	Gly	Val	Trp	
		530				535					540					
Arg	Glu	Pro	Ser	Ile	His	His	Ala	Thr	Ala	Ala	Ser	Gly	Pro	Gln	Glu	
545					550					555					560	
Pro	Ala	Gly	Gly	Asp	Ser	Ser	Val	Ala	Thr	Gln	Asn	Asn	Asp	Gly	Thr	
				565					570					575		
Asp	Gly	Gln	Lys	Leu	Leu	Leu	Phe	Tyr	Ile	Leu	Gly	Thr	Val	Val	Ala	
			580					585					590			
Ile	Leu	Leu	Leu	Leu	Ala	Leu	Ala	Leu	Gly	Leu	Leu	Val	Tyr	Arg	Lys	
		595					600					605				
Arg	Arg	Ala	Lys	Arg	Glu	Glu	Lys	Lys	Glu	Lys	Lys	Pro	Gln	Asn	Ala	
		610				615					620					
Ala	Asp	Ser	Tyr	Ser	Trp	Val	Pro	Glu	Arg	Ala	Glu	Ser	Arg	Ala	Met	
625					630					635					640	
Glu	Asn	Gln	Tyr	Ser	Pro	Thr	Pro	Gly	Thr	Asp	Cys					
				645					650							

<210> 84
 <211> 1338
 <212> PRT
 <213> Homo sapiens

<400> 84

```

Met Val Ser Tyr Trp Asp Thr Gly Val Leu Leu Cys Ala Leu Leu Ser
 1          5          10          15
Cys Leu Leu Leu Thr Gly Ser Ser Ser Gly Ser Lys Leu Lys Asp Pro
 20          25          30
Glu Leu Ser Leu Lys Gly Thr Gln His Ile Met Gln Ala Gly Gln Thr
 35          40          45
Leu His Leu Gln Cys Arg Gly Glu Ala Ala His Lys Trp Ser Leu Pro
 50          55          60
Glu Met Val Ser Lys Glu Ser Glu Arg Leu Ser Ile Thr Lys Ser Ala
 65          70          75
Cys Gly Arg Asn Gly Lys Gln Phe Cys Ser Thr Leu Thr Leu Asn Thr
 85          90          95
Ala Gln Ala Asn His Thr Gly Phe Tyr Ser Cys Lys Tyr Leu Ala Val
 100         105         110
Pro Thr Ser Lys Lys Lys Glu Thr Glu Ser Ala Ile Tyr Ile Phe Ile
 115         120         125
Ser Asp Thr Gly Arg Pro Phe Val Glu Met Tyr Ser Glu Ile Pro Glu
 130         135         140
Ile Ile His Met Thr Glu Gly Arg Glu Leu Val Ile Pro Cys Arg Val
 145         150         155
Thr Ser Pro Asn Ile Thr Val Thr Leu Lys Lys Phe Pro Leu Asp Thr
 165         170         175
Leu Ile Pro Asp Gly Lys Arg Ile Ile Trp Asp Ser Arg Lys Gly Phe
 180         185         190
Ile Ile Ser Asn Ala Thr Tyr Lys Glu Ile Gly Leu Leu Thr Cys Glu
 195         200         205
Ala Thr Val Asn Gly His Leu Tyr Lys Thr Asn Tyr Leu Thr His Arg
 210         215         220
Gln Thr Asn Thr Ile Ile Asp Val Gln Ile Ser Thr Pro Arg Pro Val
 225         230         235
Lys Leu Leu Arg Gly His Thr Leu Val Leu Asn Cys Thr Ala Thr Thr
 245         250         255
Pro Leu Asn Thr Arg Val Gln Met Thr Trp Ser Tyr Pro Asp Glu Lys
 260         265         270
Asn Lys Arg Ala Ser Val Arg Arg Arg Ile Asp Gln Ser Asn Ser His
 275         280         285
Ala Asn Ile Phe Tyr Ser Val Leu Thr Ile Asp Lys Met Gln Asn Lys
 290         295         300
Asp Lys Gly Leu Tyr Thr Cys Arg Val Arg Ser Gly Pro Ser Phe Lys
 305         310         315
Ser Val Asn Thr Ser Val His Ile Tyr Asp Lys Ala Phe Ile Thr Val
 325         330         335
Lys His Arg Lys Gln Gln Val Leu Glu Thr Val Ala Gly Lys Arg Ser
 340         345         350
Tyr Arg Leu Ser Met Lys Val Lys Ala Phe Pro Ser Pro Glu Val Val
 355         360         365
Trp Leu Lys Asp Gly Leu Pro Ala Thr Glu Lys Ser Ala Arg Tyr Leu
 370         375         380
Thr Arg Gly Tyr Ser Leu Ile Ile Lys Asp Val Thr Glu Glu Asp Ala
 385         390         395
Gly Asn Tyr Thr Ile Leu Leu Ser Ile Lys Gln Ser Asn Val Phe Lys
 405         410         415
Asn Leu Thr Ala Thr Leu Ile Val Asn Val Lys Pro Gln Ile Tyr Glu
 420         425         430

```


Lys Ala Val Ser Ser Phe Pro Asp Pro Ala Leu Tyr Pro Leu Gly Ser
 435 440 445
 Arg Gln Ile Leu Thr Cys Thr Ala Tyr Gly Ile Pro Gln Pro Thr Ile
 450 455 460
 Lys Trp Phe Trp His Pro Cys Asn His Asn His Ser Glu Ala Arg Cys
 465 470 475 480
 Asp Phe Cys Ser Asn Asn Glu Glu Ser Phe Ile Leu Asp Ala Asp Ser
 485 490 495
 Asn Met Gly Asn Arg Ile Glu Ser Ile Thr Gln Arg Met Ala Ile Ile
 500 505 510
 Glu Gly Lys Asn Lys Met Ala Ser Thr Leu Val Val Ala Asp Ser Arg
 515 520 525
 Ile Ser Gly Ile Tyr Ile Cys Ile Ala Ser Asn Lys Val Gly Thr Val
 530 535 540
 Gly Arg Asn Ile Ser Phe Tyr Ile Thr Asp Val Pro Asn Gly Phe His
 545 550 555 560
 Val Asn Leu Glu Lys Met Pro Thr Glu Gly Glu Asp Leu Lys Leu Ser
 565 570 575
 Cys Thr Val Asn Lys Phe Leu Tyr Arg Asp Val Thr Trp Ile Leu Leu
 580 585 590
 Arg Thr Val Asn Asn Arg Thr Met His Tyr Ser Ile Ser Lys Gln Lys
 595 600 605
 Met Ala Ile Thr Lys Glu His Ser Ile Thr Leu Asn Leu Thr Ile Met
 610 615 620
 Asn Val Ser Leu Gln Asp Ser Gly Thr Tyr Ala Cys Arg Ala Arg Asn
 625 630 635 640
 Val Tyr Thr Gly Glu Glu Ile Leu Gln Lys Lys Glu Ile Thr Ile Arg
 645 650 655
 Asp Gln Glu Ala Pro Tyr Leu Leu Arg Asn Leu Ser Asp His Thr Val
 660 665 670
 Ala Ile Ser Ser Ser Thr Thr Leu Asp Cys His Ala Asn Gly Val Pro
 675 680 685
 Glu Pro Gln Ile Thr Trp Phe Lys Asn Asn His Lys Ile Gln Gln Glu
 690 695 700
 Pro Gly Ile Ile Leu Gly Pro Gly Ser Ser Thr Leu Phe Ile Glu Arg
 705 710 715 720
 Val Thr Glu Glu Asp Glu Gly Val Tyr His Cys Lys Ala Thr Asn Gln
 725 730 735
 Lys Gly Ser Val Glu Ser Ser Ala Tyr Leu Thr Val Gln Gly Thr Ser
 740 745 750
 Asp Lys Ser Asn Leu Glu Leu Ile Thr Leu Thr Cys Thr Cys Val Ala
 755 760 765
 Ala Thr Leu Phe Trp Leu Leu Thr Leu Leu Ile Arg Lys Met Lys
 770 775 780
 Arg Ser Ser Ser Glu Ile Lys Thr Asp Tyr Leu Ser Ile Ile Met Asp
 785 790 795 800
 Pro Asp Glu Val Pro Leu Asp Glu Gln Cys Glu Arg Leu Pro Tyr Asp
 805 810 815
 Ala Ser Lys Trp Glu Phe Ala Arg Glu Arg Leu Lys Leu Gly Lys Ser
 820 825 830
 Leu Gly Arg Gly Ala Phe Gly Lys Val Val Gln Ala Ser Ala Phe Gly
 835 840 845
 Ile Lys Lys Ser Pro Thr Cys Arg Thr Val Ala Val Lys Met Leu Lys
 850 855 860
 Glu Gly Ala Thr Ala Ser Glu Tyr Lys Ala Leu Met Thr Glu Leu Lys
 865 870 875 880
 Ile Leu Thr His Ile Gly His His Leu Asn Val Val Asn Leu Leu Gly
 885 890 895
 Ala Cys Thr Lys Gln Gly Gly Pro Leu Met Val Ile Val Glu Tyr Cys
 900 905 910

<400> 85
 Met Glu Asn Gly Tyr Thr Tyr Glu Asp Tyr Lys Asn Thr Ala Glu Trp
 1 5 10 15
 Leu Leu Ser His Thr Lys His Arg Pro Gln Val Ala Ile Ile Cys Gly
 20 25 30
 Ser Gly Leu Gly Gly Leu Thr Asp Lys Leu Thr Gln Ala Gln Ile Phe
 35 40 45
 Asp Tyr Ser Glu Ile Pro Asn Phe Pro Arg Ser Thr Val Pro Gly His
 50 55 60
 Ala Gly Arg Leu Val Phe Gly Phe Leu Asn Gly Arg Ala Cys Val Met
 65 70 75 80
 Met Gln Gly Arg Phe His Met Tyr Glu Gly Tyr Pro Leu Trp Lys Val
 85 90 95
 Thr Phe Pro Val Arg Val Phe His Leu Leu Gly Val Asp Thr Leu Val
 100 105 110
 Val Thr Asn Ala Ala Gly Gly Leu Asn Pro Lys Phe Glu Val Gly Asp
 115 120 125
 Ile Met Leu Ile Arg Asp His Ile Asn Leu Pro Gly Phe Ser Gly Gln
 130 135 140
 Asn Pro Leu Arg Gly Pro Asn Asp Glu Arg Phe Gly Asp Arg Phe Pro
 145 150 155 160
 Ala Met Ser Asp Ala Tyr Asp Arg Thr Met Arg Gln Arg Ala Leu Ser
 165 170 175
 Thr Trp Lys Gln Met Gly Glu Gln Arg Glu Leu Gln Glu Gly Thr Tyr
 180 185 190
 Val Met Val Ala Gly Pro Ser Phe Glu Thr Val Ala Glu Cys Arg Val
 195 200 205
 Leu Gln Lys Leu Gly Ala Asp Ala Val Gly Met Ser Thr Val Pro Glu
 210 215 220
 Val Ile Val Ala Arg His Cys Gly Leu Arg Val Phe Gly Phe Ser Leu
 225 230 235 240
 Ile Thr Asn Lys Val Ile Met Asp Tyr Glu Ser Leu Glu Lys Ala Asn
 245 250 255
 His Glu Glu Val Leu Ala Ala Gly Lys Gln Ala Ala Gln Lys Leu Glu
 260 265 270
 Gln Phe Val Ser Ile Leu Met Ala Ser Ile Pro Leu Pro Asp Lys Ala
 275 280 285
 Ser

<210> 86
 <211> 509
 <212> PRT
 <213> Homo sapiens

<400> 86
 Met Pro Pro Glu Gln His His Gln Pro Asn Lys Val Ser Pro Lys Leu
 1 5 10 15
 Cys Ser Ala Gln Pro Ala Pro Arg Gly Arg Arg Arg Pro Gly Gly Arg
 20 25 30
 Gly Pro Ala Ala Gly Gly Arg Thr Phe Ala Asn Ala Arg Phe Val Leu
 35 40 45
 Gly Glu Gly Val Ala Ile Glu Arg Gly Ala Asp Thr Thr Gln Pro
 50 55 60
 Pro Val Ala Gly Ser Val Asn Pro Glu Gly Ala Ala Ala Ala Leu Val
 65 70 75 80
 Pro Leu Ala Gly Ala Arg Val Ala Ala Ala Ala Asp Ala Leu His Asp
 85 90 95
 Ala Pro Arg Ala Val Pro Gly Leu Leu Ala Leu Gly Leu Val Thr Gly
 100 105 110

Gln Ala Asp Gln Arg Pro Gly Ala Gly Ala Arg Gln Gln Gln Gln Gln
 115 120 125
 Pro Gln Gln Arg Asp Gln Glu Val Pro Ala Ala Gly Gln Pro Pro Val
 130 135 140
 Pro Arg His Gln Val His Pro Pro Ala Pro Pro Pro Pro Arg
 145 150 155 160
 Ser Arg Ala Gly Ser Gly Ala Gly Ala Leu Pro Cys Ala Gly His Thr
 165 170 175
 Arg Arg Arg Arg Arg Thr Ser Ser Pro Arg Ser Ser Pro Pro Leu Ser
 180 185 190
 Gly Pro Pro Gly Arg Ala Ser Pro Arg Gly Ala Arg Pro Pro Pro Leu
 195 200 205
 Leu Arg Ala Ala Pro Thr Pro Ser Pro Arg Ala Leu Ala Pro Ala Ala
 210 215 220
 Ala Ser Pro Pro Pro Pro Pro Pro Pro Gly Arg Glu Gly Glu Lys
 225 230 235 240
 Arg Lys Lys Phe Pro Pro Gly Ser Ser Gly Ser Thr Gln Thr Ser Gly
 245 250 255
 Ala Ala Ala Ala Val Ala Ala Ala Leu Gly Ser Ser Pro Gly Arg Arg
 260 265 270
 Arg Leu Leu Pro Leu Leu Leu Arg Val Gly Arg Pro Arg Ser Gly Ala
 275 280 285
 Ala Ser Gly Pro Val Pro Ala Ser Arg Ala Ala Glu Trp Ala Arg Trp
 290 295 300
 Arg Ser Thr Arg Ser Ala Ala Ser Ala Pro Arg Ala Pro Leu Ala Ser
 305 310 315 320
 Leu Leu Arg Arg Ser Ser Gly Arg Leu Phe Met Ala Gly Ala Ser Ala
 325 330 335
 Ala Arg Ala Ala Pro Ser Pro Ile Leu Pro Pro Pro Pro Asp Leu Pro
 340 345 350
 Pro Thr Pro Thr Arg Arg Ala Pro Leu Ile Gly Cys Pro Pro Ser Pro
 355 360 365
 Ala Arg Pro Ala Pro Ser Ala Ser Pro Ser Pro Ser Arg Ala Ala Gly
 370 375 380
 Pro Phe Leu Pro Pro Ser His Ala Ser Thr Ser Ser Arg Ser Pro Pro
 385 390 395 400
 Pro Arg Ala Arg Arg Thr Glu Pro Ala Val Pro Pro Ser Cys Gly Ser
 405 410 415
 Gly Pro Gly Ala Ala Gly Ala Leu Arg Met Gly Leu Gly Arg Thr Gln
 420 425 430
 Arg Ala Ala Arg Val Ala Val Ser Arg Ala Leu Ala Gly Thr Val Ala
 435 440 445
 Ala Ala Ala Gly Leu Gly Ala Arg Arg Ala Arg Arg Leu His Leu Arg
 450 455 460
 Gly Gln Ile Gly Val Arg Arg Val Ala Gly Thr Pro Glu Ala Arg Gly
 465 470 475 480
 Arg Gly Asp Gly Cys Ser Leu Gly Arg Val Ser Pro Asp Arg Thr Pro
 485 490 495
 Gly Lys Gly Ser Lys Gly Met Glu Pro Pro His Thr Gly
 500 505

<210> 87

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> nuclear target motif

<400> 87
Arg Arg Arg Pro
1

<210> 88
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> nuclear target motif

<400> 88
Arg Arg Arg Arg
1

<210> 89
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> nuclear target motif

<400> 89
Lys Arg Lys Lys
1

<210> 90
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> nuclear target motif

<400> 90
Pro Pro Arg Ala Arg Arg Thr
1 5

<210> 91
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> nuclear target motif

<400> 91
Pro Arg Ala Arg Arg Thr Glu
1 5

<210> 92
<211> 712
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (510)...(510)
<223> Xaa = Phe, Leu, Ile or Val

<400> 92
Met Lys Thr Ala Ala Leu Thr Pro Pro Arg Ser Pro Pro Pro Pro Pro
1 5 10 15
Leu Arg Pro Pro Pro Met Lys Arg Leu Pro Leu Leu Val Val Phe Ser
20 25 30
Thr Leu Leu Asn Cys Ser Tyr Thr Gln Asn Cys Thr Lys Thr Pro Cys
35 40 45
Leu Pro Asn Ala Lys Cys Glu Ile Arg Asn Gly Ile Glu Ala Cys Tyr
50 55 60
Cys Asn Met Gly Phe Ser Ser Gly Asn Gly Val Thr Ile Cys Glu Asp Asp
65 70 75 80
Asn Glu Cys Gly Asn Leu Thr Gln Ser Cys Gly Glu Asn Ala Asn Cys
85 90 95
Thr Asn Thr Glu Gly Ser Tyr Tyr Cys Met Cys Val Pro Gly Phe Arg
100 105 110
Ser Ser Ser Asn Gln Asp Arg Phe Ile Thr Asn Asp Gly Thr Val Cys
115 120 125
Ile Glu Asn Val Asn Ala Asn Cys His Leu Asp Asn Val Cys Ile Ala
130 135 140
Ala Asn Ile Asn Lys Thr Leu Thr Lys Ile Arg Ser Ile Lys Glu Pro
145 150 155 160
Val Ala Leu Leu Gln Glu Val Tyr Arg Asn Ser Val Thr Asp Leu Ser
165 170 175
Pro Thr Asp Ile Ile Thr Tyr Ile Glu Ile Leu Ala Glu Ser Ser Ser
180 185 190
Leu Leu Gly Tyr Lys Asn Asn Thr Ile Ser Ala Lys Asp Thr Leu Ser
195 200 205
Asn Ser Thr Leu Thr Glu Phe Val Lys Thr Val Asn Asn Phe Val Gln
210 215 220
Arg Asp Thr Phe Val Val Trp Asp Lys Leu Ser Val Asn His Arg Arg
225 230 235 240
Thr His Leu Thr Lys Leu Met His Thr Val Glu Gln Ala Thr Leu Arg
245 250 255
Ile Ser Gln Ser Phe Gln Lys Thr Thr Glu Phe Asp Thr Asn Ser Thr
260 265 270
Asp Ile Ala Leu Lys Val Phe Phe Phe Asp Ser Tyr Asn Met Lys His
275 280 285
Ile His Pro His Met Asn Met Asp Gly Asp Tyr Ile Asn Ile Phe Pro
290 295 300
Lys Arg Lys Ala Ala Tyr Asp Ser Asn Gly Asn Val Ala Val Ala Phe
305 310 315 320
Leu Tyr Tyr Lys Ser Ile Gly Pro Leu Leu Ser Ser Ser Asp Asn Phe
325 330 335
Leu Leu Lys Pro Gln Asn Tyr Asp Asn Ser Glu Glu Glu Glu Arg Val
340 345 350
Ile Ser Ser Val Ile Ser Val Ser Met Ser Ser Asn Pro Pro Thr Leu
355 360 365
Tyr Glu Leu Glu Lys Ile Thr Phe Thr Leu Ser His Arg Lys Val Thr
370 375 380
Asp Arg Tyr Arg Ser Leu Cys Ala Phe Trp Asn Tyr Ser Pro Asp Thr
385 390 395 400
Met Asn Gly Ser Trp Ser Ser Glu Gly Cys Glu Leu Thr Tyr Ser Asn
405 410 415
Glu Thr His Thr Ser Cys Arg Cys Asn His Leu Thr His Phe Ala Ile
420 425 430
Leu Met Ser Ser Gly Pro Ser Ile Gly Ile Lys Asp Tyr Asn Ile Leu
435 440 445
Thr Arg Ile Thr Gln Leu Gly Ile Ile Ile Ser Leu Ile Cys Leu Ala
450 455 460
Ile Cys Ile Phe Thr Phe Trp Phe Phe Ser Glu Ile Gln Ser Thr Arg
465 470 475 480

Thr Thr Ile His Lys Asn Leu Cys Cys Ser Leu Phe Leu Ala Glu Leu
 485 490 495
 Val Phe Leu Val Gly Ile Asn Thr Asn Thr Asn Lys Leu Xaa Ser Val
 500 505 510
 Ser Ile Ile Ala Gly Leu Leu His Tyr Phe Phe Leu Ala Phe Ala
 515 520 525
 Trp Met Cys Ile Glu Gly Ile His Leu Tyr Leu Ile Val Val Gly Val
 530 535 540
 Ile Tyr Asn Lys Gly Phe Leu His Lys Asn Phe Tyr Ile Phe Gly Tyr
 545 550 555 560
 Leu Ser Pro Ala Val Val Val Gly Phe Ser Ala Ala Leu Gly Tyr Arg
 565 570 575
 Tyr Tyr Gly Thr Thr Lys Val Cys Trp Leu Ser Thr Glu Thr His Phe
 580 585 590
 Ile Trp Ser Phe Ile Gly Pro Ala Cys Leu Ile Ile Leu Val Asn Leu
 595 600 605
 Leu Ala Phe Gly Val Ile Ile Tyr Lys Val Phe Arg His Thr Ala Gly
 610 615 620
 Leu Lys Pro Glu Val Ser Cys Phe Glu Asn Ile Arg Ser Cys Ala Arg
 625 630 635 640
 Gly Ala Leu Ala Leu Leu Phe Leu Leu Gly Thr Thr Trp Ile Phe Gly
 645 650 655
 Val Leu His Val Val His Ala Ser Val Val Thr Ala Tyr Leu Phe Thr
 660 665 670
 Val Ser Asn Ala Phe Gln Gly Met Phe Ile Phe Leu Phe Leu Cys Val
 675 680 685
 Leu Ser Arg Lys Ile Gln Glu Glu Tyr Tyr Arg Leu Phe Lys Asn Val
 690 695 700
 Pro Cys Cys Phe Gly Cys Leu Arg
 705 710

<210> 93
 <211> 948
 <212> PRT
 <213> Homo sapiens

<400> 93
 Met Ile Leu Ser Leu Leu Phe Ser Leu Gly Gly Pro Leu Gly Trp Gly
 1 5 10 15
 Leu Leu Gly Ala Trp Ala Gln Ala Ser Ser Thr Ser Leu Ser Asp Leu
 20 25 30
 Gln Ser Ser Arg Thr Pro Gly Val Trp Lys Ala Glu Ala Glu Asp Thr
 35 40 45
 Ser Lys Asp Pro Val Gly Arg Asn Trp Cys Pro Tyr Pro Met Ser Lys
 50 55 60
 Leu Val Thr Leu Leu Ala Leu Cys Lys Thr Glu Lys Phe Leu Ile His
 65 70 75 80
 Ser Gln Gln Pro Cys Pro Gln Gly Ala Pro Asp Cys Gln Lys Val Lys
 85 90 95
 Val Met Tyr Arg Met Ala His Lys Pro Val Tyr Gln Val Lys Gln Lys
 100 105 110
 Val Leu Thr Ser Leu Ala Trp Arg Cys Cys Pro Gly Tyr Thr Gly Pro
 115 120 125
 Asn Cys Glu His His Asp Ser Met Ala Ile Pro Glu Pro Ala Asp Pro
 130 135 140
 Gly Asp Ser His Gln Glu Pro Gln Asp Gly Pro Val Ser Phe Lys Pro
 145 150 155 160
 Gly His Leu Ala Ala Val Ile Asn Glu Val Glu Val Gln Gln Glu Gln
 165 170 175
 Gln Glu His Leu Leu Gly Asp Leu Gln Asn Asp Val His Arg Val Ala
 180 185 190

Asp	Ser	Leu	Pro	Gly	Leu	Trp	Lys	Ala	Leu	Pro	Gly	Asn	Leu	Thr	Ala
Ala	Val	195	Met	Glu	Ala	Asn	Gln	Thr	Gly	His	Glu	Phe	Pro	Asp	Arg
210							215				220				
Leu	Glu	Gln	Val	Leu	Leu	Pro	His	Val	Asp	Thr	Phe	Leu	Gln	Val	His
225					230					235					240
Phe	Ser	Pro	Ile	Trp	Arg	Ser	Phe	Asn	Gln	Ser	Leu	His	Ser	Leu	Thr
			245						250					255	
Gln	Ala	Ile	Arg	Asn	Leu	Ser	Leu	Asp	Val	Glu	Ala	Asn	Arg	Gln	Ala
			260					265					270		
Ile	Ser	Arg	Val	Gln	Asp	Ser	Ala	Val	Ala	Arg	Ala	Asp	Phe	Gln	Glu
			275				280					285			
Leu	Gly	Ala	Lys	Phe	Glu	Ala	Lys	Val	Gln	Glu	Asn	Thr	Gln	Arg	Val
		290				295					300				
Gly	Gln	Leu	Arg	Gln	Asp	Val	Glu	Asp	Arg	Leu	His	Ala	Gln	His	Phe
305					310					315					320
Thr	Leu	His	Arg	Ser	Ile	Ser	Glu	Leu	Gln	Ala	Asp	Val	Asp	Thr	Lys
				325					330					335	
Leu	Lys	Arg	Leu	His	Lys	Ala	Gln	Glu	Ala	Pro	Gly	Thr	Asn	Gly	Ser
			340					345					350		
Leu	Val	Leu	Ala	Thr	Pro	Gly	Ala	Gly	Ala	Arg	Pro	Glu	Pro	Asp	Ser
		355					360					365			
Leu	Gln	Ala	Arg	Leu	Gly	Gln	Leu	Gln	Arg	Asn	Leu	Ser	Glu	Leu	His
		370				375					380				
Met	Thr	Thr	Ala	Arg	Arg	Glu	Glu	Glu	Leu	Gln	Tyr	Thr	Leu	Glu	Asp
385					390					395					400
Met	Arg	Ala	Thr	Leu	Thr	Arg	His	Val	Asp	Glu	Ile	Lys	Glu	Leu	Tyr
				405					410					415	
Ser	Glu	Ser	Asp	Glu	Thr	Phe	Asp	Gln	Ile	Ser	Lys	Val	Glu	Arg	Gln
			420					425					430		
Val	Glu	Glu	Leu	Gln	Val	Asn	His	Thr	Ala	Leu	Arg	Glu	Leu	Arg	Val
		435					440					445			
Ile	Leu	Met	Glu	Lys	Ser	Leu	Ile	Met	Glu	Glu	Asn	Lys	Glu	Glu	Val
		450				455					460				
Glu	Arg	Gln	Leu	Leu	Glu	Leu	Asn	Leu	Thr	Leu	Gln	His	Leu	Gln	Gly
465					470					475					480
Gly	His	Ala	Asp	Leu	Ile	Lys	Tyr	Val	Lys	Asp	Cys	Asn	Cys	Gln	Lys
				485					490					495	
Leu	Tyr	Leu	Asp	Leu	Asp	Val	Ile	Arg	Glu	Gly	Gln	Arg	Asp	Ala	Thr
			500					505					510		
Arg	Ala	Leu	Glu	Glu	Thr	Gln	Val	Ser	Leu	Asp	Glu	Arg	Arg	Gln	Leu
		515					520					525			
Asp	Gly	Ser	Ser	Leu	Gln	Ala	Leu	Gln	Asn	Ala	Val	Asp	Ala	Val	Ser
		530				535					540				
Leu	Ala	Val	Asp	Ala	His	Lys	Ala	Glu	Gly	Glu	Arg				

Arg Pro Ala Glu His Leu Glu Pro Ser His Asp Ala Gly Arg Glu Glu
675 680 685
Ala Ala Thr Thr Ala Leu Ala Gly Leu Ala Arg Glu Leu Gln Ser Leu
690 695 700
Ser Asn Asp Val Lys Asn Val Gly Arg Cys Cys Glu Ala Glu Ala Gly
705 710 715 720
Ala Gly Ala Ala Ser Leu Asn Ala Ser Leu Asp Gly Leu His Asn Ala
725 730 735
Leu Phe Ala Thr Gln Arg Ser Leu Glu Gln His Gln Arg Leu Phe His
740 745 750
Ser Leu Phe Gly Asn Phe Gln Gly Leu Met Glu Ala Asn Val Ser Leu
755 760 765
Asp Leu Gly Lys Leu Gln Thr Met Leu Ser Arg Lys Gly Lys Lys Gln
770 775 780
Gln Lys Asp Leu Glu Ala Pro Arg Lys Arg Asp Lys Lys Glu Ala Glu
785 790 795 800
Pro Leu Val Asp Ile Arg Val Thr Gly Pro Val Pro Gly Ala Leu Gly
805 810 815
Ala Ala Leu Trp Glu Ala Ser Pro Val Ala Phe Tyr Ala Ser Phe Ser
820 825 830
Glu Gly Thr Ala Ala Leu Gln Thr Val Lys Phe Asn Thr Thr Tyr Ile
835 840 845
Asn Ile Gly Ser Ser Tyr Phe Pro Glu His Gly Tyr Phe Arg Ala Pro
850 855 860
Glu Arg Gly Val Tyr Leu Phe Ala Val Ser Val Glu Phe Gly Pro Gly
865 870 875 880
Pro Gly Thr Gly Gln Leu Val Phe Gly Gly His His Arg Thr Pro Val
885 890 895
Cys Thr Thr Gly Gln Gly Ser Gly Ser Thr Ala Thr Val Phe Ala Met
900 905 910
Ala Glu Leu Gln Lys Gly Glu Arg Val Trp Phe Glu Leu Thr Gln Gly
915 920 925
Ser Ile Thr Lys Arg Ser Leu Ser Gly Thr Ala Phe Gly Gly Phe Leu
930 935 940
Met Phe Lys Thr
945

<210> 94
<211> 647
<212> PRT
<213> Homo sapiens

<400> 94
Met Gly Lys Asp Phe Met Thr Lys Thr Pro Lys Ala Phe Ala Thr Lys
1 5 10 15
Ala Lys Ile Asp Lys Trp Asp Leu Ile Lys Leu Lys Ser Phe Cys Thr
20 25 30
Ala Lys Glu Thr Ile Ile Arg Val Asn Ser Gln Pro Thr Asp Trp Gln
35 40 45
Lys Thr Phe Ala Ile Tyr Pro Ser Asp Lys Gly Val Ile Ala Arg Ile
50 55 60
Tyr Lys Glu Leu Glu Gln Ile Tyr Lys Lys Lys Pro Thr Lys Thr
65 70 75 80
Leu Arg Thr His Phe Leu Ser Arg Pro Lys Gly Asn Cys Trp Pro Leu
85 90 95
Gly Pro Arg Gly Asp Ser Trp Gln Leu Gly Gly Pro Ser Gly Ala Arg
100 105 110
Ala Glu Gly Lys Gly Gly Gly Thr Gly Leu Gly Lys Pro Ala Val Glu
115 120 125
Gly Gly Asp Arg Ala Pro Asp Thr Ala Leu Arg Pro Arg Ala Gly Gln
130 135 140

Ile	Gln	Val	Gly	Ser	Ser	Ser	Ala	Cys	Gly	Ala	Ser	Glu	Asn	Glu	Ala
145				150					155					160	
Gly	Val	Arg	Pro	Val	Pro	Pro	Leu	Ala	Gly	Ala	Leu	Ala	Arg	Ala	Gly
			165						170					175	
Arg	Arg	Arg	Thr	Pro	His	Cys	Arg	Pro	Cys	Trp	Leu	Leu	Gly	Leu	Gly
			180					185						190	
Gly	Leu	Leu	Gln	Pro	Ala	Pro	Arg	Tyr	His	Glu	Ala	Ala	Gly	Gly	Arg
		195					200					205			
Gly	Gly	Leu	His	Pro	Ala	Arg	Trp	Gly	Ala	Gln	His	Arg	Ala	Cys	Gly
	210					215					220				
Arg	Arg	Ala	Ala	Arg	Cys	Ala	Arg	Ala	Pro	Ala	Gly	Arg	Pro	Arg	Ala
					230					235					240
Arg	Arg	Gly	Leu	Gln	Arg	Pro	Ala	Val	Leu	Gly	Arg	Thr	Gly	Ala	Gln
				245					250					255	
Ala	Phe	Pro	Leu	His	Pro	Gly	Glu	Arg	Ala	Phe	Ala	Gly	Phe	Leu	Leu
		260						265					270		
Ala	Val	Leu	Arg	Pro	Arg	Arg	Ser	Arg	Lys	Arg	His	Ala	Ala	Val	Gly
		275					280					285			
Gly	Gly	Ala	Pro	Thr	Leu	Leu	His	Arg	Ala	Glu	Met	Arg	Gly	Thr	Pro
	290					295					300				
Gly	His	Arg	Trp	Gly	Arg	Ala	Arg	Ser	Trp	Lys	Glu	Met	Arg	Cys	His
	305				310					315					320
Leu	Arg	Ala	Asn	Gly	Tyr	Leu	Cys	Lys	Tyr	Gln	Phe	Glu	Val	Leu	Cys
			325						330				335		
Pro	Ala	Pro	Arg	Pro	Gly	Ala	Ala	Ser	Asn	Leu	Ser	Tyr	Arg	Ala	Pro
			340					345					350		
Phe	Gln	Leu	His	Ser	Ala	Ala	Leu	Asp	Phe	Ser	Pro	Pro	Gly	Thr	Glu
		355					360					365			
Val	Ser	Ala	Leu	Cys	Arg	Gly	Gln	Leu	Pro	Ile	Ser	Val	Thr	Cys	Ile
		370				375					380				
Ala	Asp	Glu	Ile	Gly	Ala	Arg	Trp	Asp	Lys	Leu	Ser	Gly	Asp	Val	Leu
					390					395				400	
Cys	Pro	Cys	Pro	Gly	Arg	Tyr	Leu	Arg	Ala	Gly	Lys	Cys	Ala	Glu	Leu
			405						410					415	
Pro	Asn	Cys	Leu	Asp	Asp	Leu	Gly	Gly	Phe	Ala	Cys	Glu	Cys	Ala	Thr
			420				425						430		
Gly	Phe	Glu	Leu	Gly	Lys	Asp	Gly	Arg	Ser	Cys	Val	Thr	Ser	Gly	Glu
		435				440						445			
Gly	Gln	Pro	Thr	Leu	Gly	Gly	Thr	Gly	Val	Pro	Thr	Arg	Arg	Pro	Pro
		450				455					460				
Ala	Thr	Ala	Thr	Ser	Pro	Val	Pro	Gln	Arg	Thr	Trp	Pro	Ile	Arg	Val
					470					475				480	
Asp	Glu	Lys	Leu	Gly	Glu	Thr	Pro	Leu	Val	Pro	Glu	Gln	Asp	Asn	Ser
				485					490					495	
Val	Thr	Ser	Ile	Pro	Glu	Ile	Pro	Arg	Trp	Gly	Ser	Gln	Ser	Thr	Met
			500					505					510		
Ser	Thr	Leu	Gln	Met	Ser	Leu	Gln	Ala	Glu	Ser	Lys	Ala	Thr	Ile	Thr
		515					520					525			
Pro	Ser	Gly	Ser	Val	Ile	Ser	Lys	Phe	Asn	Ser	Thr	Thr	Ser	Ser	Ala
						535					540				
Thr	Pro	Gln	Ala	Phe	Asp	Ser	Ser	Ser	Ala	Val	Val	Phe	Ile	Phe	Val
					550					555					560
Ser	Thr	Ala	Val	Val	Val	Leu	Val	Ile	Leu	Thr	Met	Thr	Val	Leu	Gly
				565					570					575	
Leu	Val	Lys	Leu	Cys	Phe	His	Glu	Ser	Pro	Ser	Ser	Gln	Pro	Arg	Lys
			580					585					590		
Glu	Ser	Met	Gly	Pro	Pro	Gly	Leu	Glu	Ser	Asp	Pro	Glu	Pro	Ala	Ala
			595				600					605			
Leu	Gly	Ser	Ser	Ser	Ala	His	Cys	Thr	Asn	Asn	Gly	Val	Lys	Val	Gly
			610			615					620				

Asp Cys Asp Leu Arg Asp Arg Ala Glu Gly Ala Leu Leu Ala Glu Ser
 625 630 635 640
 Pro Leu Gly Ser Ser Asp Ala
 645

<210> 95
 <211> 462
 <212> PRT
 <213> Homo sapiens

<400> 95
 Met Ile Gln Thr Val Pro Asp Pro Ala Ala His Ile Lys Glu Ala Leu
 1 5 10 15
 Ser Val Val Ser Glu Asp Gln Ser Leu Phe Glu Cys Ala Tyr Gly Thr
 20 25 30
 Pro His Leu Ala Lys Thr Glu Met Thr Ala Ser Ser Ser Ser Asp Tyr
 35 40 45
 Gly Gln Thr Ser Lys Met Ser Pro Arg Val Pro Gln Gln Asp Trp Leu
 50 55 60
 Ser Gln Pro Pro Ala Arg Val Thr Ile Lys Met Glu Cys Asn Pro Ser
 65 70 75 80
 Gln Val Asn Gly Ser Arg Asn Ser Pro Asp Glu Cys Ser Val Ala Lys
 85 90 95
 Gly Gly Lys Met Val Gly Ser Pro Asp Thr Val Gly Met Asn Tyr Gly
 100 105 110
 Ser Tyr Met Glu Glu Lys His Met Pro Pro Pro Asn Met Thr Thr Asn
 115 120 125
 Glu Arg Arg Val Ile Val Pro Ala Asp Pro Thr Leu Trp Ser Thr Asp
 130 135 140
 His Val Arg Gln Trp Leu Glu Trp Ala Val Lys Glu Tyr Gly Leu Pro
 145 150 155 160
 Asp Val Asn Ile Leu Leu Phe Gln Asn Ile Asp Gly Lys Glu Leu Cys
 165 170 175
 Lys Met Thr Lys Asp Asp Phe Gln Arg Leu Thr Pro Ser Tyr Asn Ala
 180 185 190
 Asp Ile Leu Leu Ser His Leu His Tyr Leu Arg Glu Thr Pro Leu Pro
 195 200 205
 His Leu Thr Ser Asp Asp Val Asp Lys Ala Leu Gln Asn Ser Pro Arg
 210 215 220
 Leu Met His Ala Arg Asn Thr Asp Leu Pro Tyr Glu Pro Pro Arg Arg
 225 230 235 240
 Ser Ala Trp Thr Gly His Gly His Pro Thr Pro Gln Ser Lys Ala Ala
 245 250 255
 Gln Pro Ser Pro Ser Thr Val Pro Lys Thr Glu Asp Gln Arg Pro Gln
 260 265 270
 Leu Asp Pro Tyr Gln Ile Leu Gly Pro Thr Ser Ser Arg Leu Ala Asn
 275 280 285
 Pro Gly Ser Gly Gln Ile Gln Leu Trp Gln Phe Leu Leu Glu Leu Leu
 290 295 300
 Ser Asp Ser Ser Asn Ser Ser Cys Ile Thr Trp Glu Gly Thr Asn Gly
 305 310 315 320
 Glu Phe Lys Met Thr Asp Pro Asp Glu Val Ala Arg Arg Trp Gly Glu
 325 330 335
 Arg Lys Ser Lys Pro Asn Met Asn Tyr Asp Lys Leu Ser Arg Ala Leu
 340 345 350
 Arg Tyr Tyr Tyr Asp Lys Asn Ile Met Thr Lys Val His Gly Lys Arg
 355 360 365
 Tyr Ala Tyr Lys Phe Asp Phe His Gly Ile Ala Gln Ala Leu Gln Pro
 370 375 380
 His Pro Pro Glu Ser Ser Leu Tyr Lys Tyr Pro Ser Asp Leu Pro Tyr
 385 390 395 400

Met Gly Ser Tyr His Ala His Pro Gln Lys Met Asn Phe Val Ala Pro
 405 410 415
 His Pro Pro Ala Leu Pro Val Thr Ser Ser Ser Phe Phe Ala Ala Pro
 420 425 430
 Asn Pro Tyr Trp Asn Ser Pro Thr Gly Gly Ile Tyr Pro Asn Thr Arg
 435 440 445
 Leu Pro Thr Ser His Met Pro Ser His Leu Gly Thr Tyr Tyr
 450 455 460

<210> 96
 <211> 503
 <212> PRT
 <213> Homo sapiens

<400> 96
 Met Thr Leu Gly Ser Pro Arg Lys Gly Leu Leu Met Leu Leu Met Ala
 1 5 10 15
 Leu Val Thr Gln Gly Asp Pro Val Lys Pro Ser Arg Gly Pro Leu Val
 20 25 30
 Thr Cys Thr Cys Glu Ser Pro His Cys Lys Gly Pro Thr Cys Arg Gly
 35 40 45
 Ala Trp Cys Thr Val Val Leu Val Arg Glu Glu Gly Arg His Pro Gln
 50 55 60
 Glu His Arg Gly Cys Gly Asn Leu His Arg Glu Leu Cys Arg Gly Arg
 65 70 75 80
 Pro Thr Glu Phe Val Asn His Tyr Cys Cys Asp Ser His Leu Cys Asn
 85 90 95
 His Asn Val Ser Leu Val Leu Glu Ala Thr Gln Pro Pro Ser Glu Gln
 100 105 110
 Pro Gly Thr Asp Gly Gln Leu Ala Leu Ile Leu Gly Pro Val Leu Ala
 115 120 125
 Leu Leu Ala Leu Val Ala Leu Gly Val Leu Gly Leu Trp His Val Arg
 130 135 140
 Arg Arg Gln Glu Lys Gln Arg Gly Leu His Ser Glu Leu Gly Glu Ser
 145 150 155 160
 Ser Leu Ile Leu Lys Ala Ser Glu Gln Gly Asp Thr Met Leu Gly Asp
 165 170 175
 Leu Leu Asp Ser Asp Cys Thr Thr Gly Ser Gly Ser Gly Leu Pro Phe
 180 185 190
 Leu Val Gln Arg Thr Val Ala Arg Gln Val Ala Leu Val Glu Cys Val
 195 200 205
 Gly Lys Gly Arg Tyr Gly Glu Val Trp Arg Gly Leu Trp His Gly Glu
 210 215 220
 Ser Val Ala Val Lys Ile Phe Ser Ser Arg Asp Glu Gln Ser Trp Phe
 225 230 235 240
 Arg Glu Thr Glu Ile Tyr Asn Thr Val Leu Leu Arg His Asp Asn Ile
 245 250 255
 Leu Gly Phe Ile Ala Ser Asp Met Thr Ser Arg Asn Ser Ser Thr Gln
 260 265 270
 Leu Trp Leu Ile Thr His Tyr His Glu His Gly Ser Leu Tyr Asp Phe
 275 280 285
 Leu Gln Arg Gln Thr Leu Glu Pro His Leu Ala Leu Arg Leu Ala Val
 290 295 300
 Ser Ala Ala Cys Gly Leu Ala His Leu His Val Glu Ile Phe Gly Thr
 305 310 315 320
 Gln Gly Lys Pro Ala Ile Ala His Arg Asp Phe Lys Ser Arg Asn Val
 325 330 335
 Leu Val Lys Ser Asn Leu Gln Cys Cys Ile Ala Asp Leu Gly Leu Ala
 340 345 350
 Val Met His Ser Gln Gly Ser Asp Tyr Leu Asp Ile Gly Asn Asn Pro
 355 360 365

Arg Val Gly Thr Lys Arg Tyr Met Ala Pro Glu Val Leu Asp Glu Gln
 370 375 380
 Ile Arg Thr Asp Cys Phe Glu Ser Tyr Lys Trp Thr Asp Ile Trp Ala
 385 390 395 400
 Phe Gly Leu Val Leu Trp Glu Ile Ala Arg Arg Thr Ile Val Asn Gly
 405 410 415
 Ile Val Glu Asp Tyr Arg Pro Pro Phe Tyr Asp Val Val Pro Asn Asp
 420 425 430
 Pro Ser Phe Glu Asp Met Lys Lys Val Val Cys Val Asp Gln Gln Thr
 435 440 445
 Pro Thr Ile Pro Asn Arg Leu Ala Ala Asp Pro Val Leu Ser Gly Leu
 450 455 460
 Ala Gln Met Met Arg Glu Cys Trp Tyr Pro Asn Pro Ser Ala Arg Leu
 465 470 475 480
 Thr Ala Leu Arg Ile Lys Lys Thr Leu Gln Lys Ile Ser Asn Ser Pro
 485 490 495
 Glu Lys Pro Lys Val Ile Gln
 500

<210> 97
 <211> 54
 <212> PRT
 <213> Homo sapiens

<400> 97
 Met Glu Trp Asn Gly Met Ala Trp Asn Arg Ile Lys Trp Asn Gly Ile
 1 5 10 15
 Asn Ser Ser Gly Met Glu Trp Asn Gly Met Glu Trp Asn Ala Val Gln
 20 25 30
 Cys Asn Arg Met Glu Trp Asn Glu Leu Glu Thr Gly Met Glu Trp
 35 40 45
 Asn Gly Met His Leu Asn
 50

<210> 98
 <211> 275
 <212> PRT
 <213> Homo sapiens

<400> 98
 Met Ser Ser Phe Gly Tyr Arg Thr Leu Thr Val Ala Leu Phe Thr Leu
 1 5 10 15
 Ile Cys Cys Pro Gly Ser Asp Glu Lys Val Phe Glu Val His Val Arg
 20 25 30
 Pro Lys Lys Leu Ala Val Glu Pro Lys Gly Ser Leu Glu Val Asn Cys
 35 40 45
 Ser Thr Thr Cys Asn Gln Pro Glu Val Gly Gly Leu Glu Thr Ser Leu
 50 55 60
 Asn Lys Ile Leu Leu Asp Glu Gln Ala Gln Trp Lys His Tyr Leu Val
 65 70 75 80
 Ser Asn Ile Ser His Asp Thr Val Leu Gln Cys His Phe Thr Cys Ser
 85 90 95
 Gly Lys Gln Glu Ser Met Asn Ser Asn Val Ser Val Tyr Gln Pro Pro
 100 105 110
 Arg Gln Val Ile Leu Thr Leu Gln Pro Thr Leu Val Ala Val Gly Lys
 115 120 125
 Ser Phe Thr Ile Glu Cys Arg Val Pro Thr Val Glu Pro Leu Asp Ser
 130 135 140
 Leu Thr Leu Phe Leu Phe Arg Gly Asn Glu Thr Leu His Tyr Glu Thr
 145 150 155 160

Phe Gly Lys Ala Ala Pro Ala Pro Gln Glu Ala Thr Ala Thr Phe Asn
 165 170 175
 Ser Thr Ala Asp Arg Glu Asp Gly His Arg Asn Phe Ser Cys Leu Ala
 180 185 190
 Val Leu Asp Leu Met Ser Arg Gly Gly Asn Ile Phe His Lys His Ser
 195 200 205
 Ala Pro Lys Met Leu Glu Ile Tyr Glu Pro Val Ser Asp Ser Gln Met
 210 215 220
 Val Ile Ile Val Thr Val Val Ser Val Leu Leu Ser Leu Phe Val Thr
 225 230 235
 Ser Val Leu Leu Cys Phe Ile Phe Gly Gln His Leu Arg Gln Gln Arg
 245 250 255
 Met Gly Thr Tyr Gly Val Arg Ala Ala Trp Arg Arg Leu Pro Gln Ala
 260 265 270
 Phe Arg Pro
 275

<210> 99
 <211> 784
 <212> PRT
 <213> Homo sapiens

<400> 99
 Met Gln Arg Leu Met Met Leu Leu Ala Thr Ser Gly Ala Cys Leu Gly
 1 5 10 15
 Leu Leu Ala Val Ala Ala Val Ala Ala Gly Ala Asn Pro Ala Gln
 20 25 30
 Arg Asp Thr His Ser Leu Leu Pro Thr His Arg Arg Gln Lys Arg Asp
 35 40 45
 Trp Ile Trp Asn Gln Met His Ile Asp Glu Glu Lys Asn Thr Ser Leu
 50 55 60
 Pro His His Val Gly Lys Ile Lys Ser Ser Val Ser Arg Lys Asn Ala
 65 70 75 80
 Lys Tyr Leu Leu Lys Gly Glu Tyr Val Gly Lys Val Phe Arg Val Asp
 85 90 95
 Ala Glu Thr Gly Asp Val Phe Ala Ile Glu Arg Leu Asp Arg Glu Asn
 100 105 110
 Ile Ser Glu Tyr His Leu Thr Ala Val Ile Val Asp Lys Asp Thr Gly
 115 120 125
 Glu Asn Leu Glu Thr Pro Ser Ser Phe Thr Ile Lys Val His Asp Val
 130 135 140
 Asn Asp Asn Trp Pro Val Phe Thr His Arg Leu Phe Asn Ala Ser Val
 145 150 155 160
 Pro Glu Ser Ser Ala Val Gly Thr Ser Val Ile Ser Val Thr Ala Val
 165 170 175
 Asp Ala Asp Asp Pro Thr Val Gly Asp His Ala Ser Val Met Tyr Gln
 180 185 190
 Ile Leu Lys Gly Lys Glu Tyr Phe Ala Ile Asp Asn Ser Gly Arg Ile
 195 200 205
 Ile Thr Ile Thr Lys Ser Leu Asp Arg Glu Lys Gln Ala Arg Tyr Glu
 210 215 220
 Ile Val Val Glu Ala Arg Asp Ala Gln Gly Leu Arg Gly Asp Ser Gly
 225 230 235 240
 Thr Ala Thr Val Leu Val Thr Leu Gln Asp Ile Asn Asp Asn Phe Pro
 245 250 255
 Phe Phe Thr Gln Thr Lys Tyr Thr Phe Val Val Pro Glu Asp Thr Arg
 260 265 270
 Val Gly Thr Ser Val Gly Ser Leu Phe Val Glu Asp Pro Asp Glu Pro
 275 280 285
 Gln Asn Arg Met Thr Lys Tyr Ser Ile Leu Arg Gly Asp Tyr Gln Asp
 290 295 300

Ala	Phe	Thr	Ile	Glu	Thr	Asn	Pro	Ala	His	Asn	Glu	Gly	Ile	Ile	Lys	305	310	315	320
Pro	Met	Lys	Pro	Leu	Asp	Tyr	Glu	Tyr	Ile	Gln	Gln	Tyr	Ser	Phe	Ile	325	330	335	340
Val	Glu	Ala	Thr	Asp	Pro	Thr	Ile	Asp	Leu	Arg	Tyr	Met	Ser	Pro	Pro	340	345	350	355
Ala	Gly	Asn	Arg	Ala	Gln	Val	Ile	Ile	Asn	Ile	Thr	Asp	Val	Asp	Glu	355	360	365	370
Pro	Pro	Ile	Phe	Gln	Gln	Pro	Phe	Tyr	His	Phe	Gln	Leu	Lys	Glu	Asn	370	375	380	385
Gln	Lys	Lys	Pro	Leu	Ile	Gly	Thr	Val	Leu	Ala	Met	Asp	Pro	Asp	Ala	390	395	400	405
Ala	Arg	His	Ser	Ile	Gly	Tyr	Ser	Ile	Arg	Arg	Thr	Ser	Asp	Lys	Gly	410	415	420	425
Gln	Phe	Phe	Arg	Val	Thr	Lys	Lys	Gly	Asp	Ile	Tyr	Asn	Glu	Lys	Glu	430	435	440	445
Leu	Asp	Arg	Glu	Val	Tyr	Pro	Trp	Tyr	Asn	Leu	Thr	Val	Glu	Ala	Lys	450	455	460	465
Glu	Leu	Asp	Ser	Thr	Gly	Thr	Pro	Thr	Gly	Lys	Glu	Ser	Ile	Val	Gln	470	475	480	485
Val	His	Ile	Glu	Val	Leu	Asp	Glu	Asn	Asp	Asn	Ala	Pro	Glu	Phe	Ala	490	495	500	505
Lys	Pro	Tyr	Gln	Pro	Lys	Val	Cys	Glu	Asn	Ala	Val	His	Gly	Gln	Leu	510	515	520	525
Val	Leu	Gln	Ile	Ser	Ala	Ile	Asp	Lys	Asp	Ile	Thr	Pro	Arg	Asn	Val	530	535	540	545
Lys	Phe	Lys	Phe	Thr	Leu	Asn	Thr	Glu	Asn	Asn	Phe	Thr	Leu	Thr	Asp	550	555	560	565
Asn	His	Asp	Asn	Thr	Ala	Asn	Ile	Thr	Val	Lys	Tyr	Gly	Gln	Phe	Asp	570	575	580	585
Arg	Glu	His	Thr	Lys	Val	His	Phe	Leu	Pro	Val	Val	Ile	Ser	Asp	Asn	590	595	600	605
Gly	Met	Pro	Ser	Arg	Thr	Gly	Thr	Ser	Thr	Leu	Thr	Val	Ala	Val	Cys	610	615	620	625
Lys	Cys	Asn	Glu	Gln	Gly	Glu	Phe	Thr	Phe	Cys	Glu	Asp	Met	Ala	Ala	630	635	640	645
Gln	Val	Gly	Val	Ser	Ile	Gln	Ala	Val	Val	Ala	Ile	Leu	Leu	Cys	Ile	650	655	660	665
Leu	Thr	Ile	Thr	Val	Ile	Thr	Leu	Leu	Ile	Phe	Leu	Arg	Arg	Arg	Leu	670	675	680	685
Arg	Lys	Gln	Ala	Arg	Ala	His	Gly	Lys	Ser	Val	Pro	Glu	Ile	His	Glu	690	695	700	705
Gln	Leu	Val	Thr	Tyr	Asp	Glu	Glu	Gly	Gly	Gly	Glu	Met	Asp	Thr	Thr	710	715	720	725
Ser	Tyr	Asp	Val	Ser	Val	Leu	Asn	Ser	Val	Arg	Arg	Gly	Gly	Ala	Lys	730	735	740	745
Pro	Pro	Arg	Pro	Ala	Leu	Asp	Ala	Arg	Pro	Ser	Leu	Tyr	Ala	Gln	Val	750	755	760	765
Gln	Lys	Pro	Pro	Arg	His	Ala	Pro	Gly	Ala	His	Gly	Gly	Pro	Gly	Glu	770	775	780	785
Met	Ala	Ala	Met	Ile	Glu	Val	Lys	Lys	Asp	Glu	Ala	Asp	His	Asp	Gly	790	795	800	805
Asp	Gly	Pro	Pro	Tyr	Asp	Thr	Leu	His	Ile	Tyr	Gly	Tyr	Glu	Gly	Ser	810	815	820	825
Glu	Ser	Ile	Ala	Glu	Ser	Leu	Ser	Ser	Leu	Gly	Thr	Asp	Ser	Ser	Asp	830	835	840	845
Ser	Asp	Val	Asp	Tyr	Asp	Phe	Leu	Asn	Asp	Trp	Gly	Pro	Arg	Phe	Lys	850	855	860	865
Met	Leu	Ala	Glu	Leu	Tyr	Gly	Ser	Asp	Pro	Arg	Glu	Glu	Leu	Leu	Tyr	870	875	880	885

<210> 100
 <211> 774
 <212> PRT
 <213> Homo sapiens

```

    <400> 100
Met  Glu  Arg  Pro   Leu  Cys  Ser  His  Leu  Cys  Ser  Cys  Leu  Ala  Met  Leu
 1              5              10              15
Ala  Leu  Leu  Ser  Pro  Leu  Ser  Leu  Ala  Gln  Tyr  Asp  Ser  Trp  Pro  His
              20              25              30
Tyr  Pro  Glu  Tyr  Phe  Gln  Gln  Pro  Ala  Pro  Glu  Tyr  His  Gln  Pro  Gln
              35              40              45
Ala  Pro  Ala  Asn  Val  Ala  Lys  Ile  Gln  Leu  Arg  Leu  Ala  Gly  Gln  Lys
              50              55              60
Arg  Lys  His  Ser  Glu  Gly  Arg  Val  Glu  Val  Tyr  Tyr  Asp  Gly  Gln  Trp
65              70              75              80
Gly  Thr  Val  Cys  Asp  Asp  Asp  Phe  Ser  Ile  His  Ala  Ala  His  Val  Val
              85              90              95
Cys  Arg  Glu  Leu  Gly  Tyr  Val  Glu  Ala  Lys  Ser  Trp  Thr  Ala  Ser  Ser
              100              105              110
Ser  Tyr  Gly  Lys  Gly  Glu  Gly  Pro  Ile  Trp  Leu  Asp  Asn  Leu  His  Cys
              115              120              125
Thr  Gly  Asn  Glu  Ala  Thr  Leu  Ala  Ala  Cys  Thr  Ser  Asn  Gly  Trp  Gly
130              135              140
Val  Thr  Asp  Cys  Lys  His  Thr  Glu  Asp  Val  Gly  Val  Val  Cys  Ser  Asp
145              150              155              160
Lys  Arg  Ile  Pro  Gly  Phe  Lys  Phe  Asp  Asn  Ser  Leu  Ile  Asn  Gln  Ile
              165              170              175
Glu  Asn  Leu  Asn  Ile  Gln  Val  Glu  Asp  Ile  Arg  Ile  Arg  Ala  Ile  Leu
              180              185              190
Ser  Thr  Tyr  Arg  Lys  Arg  Thr  Pro  Val  Met  Glu  Gly  Tyr  Val  Glu  Val
195              200              205
Lys  Glu  Gly  Lys  Thr  Trp  Lys  Gln  Ile  Cys  Asp  Lys  His  Trp  Thr  Ala
210              215              220
Lys  Asn  Ser  Arg  Val  Val  Cys  Gly  Met  Phe  Gly  Phe  Pro  Gly  Glu  Arg
225              230              235              240
Thr  Tyr  Asn  Thr  Lys  Val  Tyr  Lys  Met  Phe  Ala  Ser  Arg  Arg  Lys  Gln
              245              250              255
Arg  Tyr  Trp  Pro  Phe  Ser  Met  Asp  Cys  Thr  Gly  Thr  Glu  Ala  His  Ile
              260              265              270
Ser  Ser  Cys  Lys  Leu  Gly  Pro  Gln  Val  Ser  Leu  Asp  Pro  Met  Lys  Asn
275              280              285
Val  Thr  Cys  Glu  Asn  Gly  Leu  Pro  Ala  Val  Val  Ser  Cys  Val  Pro  Gly
290              295              300
Gln  Val  Phe  Ser  Pro  Asp  Gly  Pro  Ser  Arg  Phe  Arg  Lys  Ala  Tyr  Lys
305              310              315              320
Pro  Glu  Gln  Pro  Leu  Val  Arg  Leu  Arg  Gly  Gly  Ala  Tyr  Ile  Gly  Glu
              325              330              335
Gly  Arg  Val  Glu  Val  Leu  Lys  Asn  Gly  Glu  Trp  Gly  Thr  Val  Cys  Asp
              340              345              350
Asp  Lys  Trp  Asp  Leu  Val  Ser  Ala  Ser  Val  Val  Cys  Arg  Glu  Leu  Gly
              355              360              365
Phe  Gly  Ser  Ala  Lys  Glu  Ala  Val  Thr  Gly  Ser  Arg  Leu  Gly  Gln  Gly
              370              375              380
Ile  Gly  Pro  Ile  His  Leu  Asn  Glu  Ile  Gln  Cys  Thr  Gly  Asn  Glu  Lys
385              390              395              400
Ser  Ile  Ile  Asp  Cys  Lys  Phe  Asn  Ala  Glu  Ser  Gln  Gly  Cys  Asn  His
              405              410              415
Glu  Glu  Asp  Ala  Gly  Val  Arg  Cys  Asn  Thr  Pro  Ala  Met  Gly  Leu  Gln
              420              425              430

```


Ala	Arg	Asn	Gly	Ser	His	Gln	Val	Thr	Leu	Arg	Gly	Phe	Ser	Lys	Pro
				85					90					95	
Ser	Asp	Leu	Val	Gly	Val	Phe	Ser	Cys	Val	Gly	Gly	Ala	Gly	Ala	Arg
		100						105				110			
Arg	Thr	Arg	Val	Ile	Tyr	Val	His	Asn	Ser	Pro	Gly	Ala	His	Leu	Leu
		115						120				125			
Pro	Asp	Lys	Val	Thr	His	Thr	Val	Asn	Lys	Gly	Asp	Thr	Ala	Val	Leu
		130						135				140			
Ser	Ala	Arg	Val	His	Lys	Glu	Lys	Gln	Thr	Asp	Val	Ile	Trp	Lys	Ser
		145			150					155					160
Asn	Gly	Ser	Tyr	Phe	Tyr	Thr	Leu	Asp	Trp	His	Glu	Ala	Gln	Asp	Gly
				165					170					175	
Arg	Phe	Leu	Leu	Gln	Leu	Pro	Asn	Val	Gln	Pro	Pro	Ser	Ser	Gly	Ile
		180						185					190		
Tyr	Ser	Ala	Thr	Tyr	Leu	Glu	Ala	Ser	Pro	Leu	Gly	Ser	Ala	Phe	Phe
		195						200				205			
Arg	Leu	Ile	Val	Arg	Gly	Cys	Gly	Ala	Gly	Arg	Trp	Gly	Pro	Gly	Cys
		210				215					220				
Thr	Lys	Glu	Cys	Pro	Gly	Cys	Leu	His	Gly	Gly	Val	Cys	His	Asp	His
		225				230					235				240
Asp	Gly	Glu	Cys	Val	Cys	Pro	Pro	Gly	Phe	Thr	Gly	Thr	Arg	Cys	Glu
				245					250					255	
Gln	Ala	Cys	Arg	Glu	Gly	Arg	Phe	Gly	Gln	Ser	Cys	Gln	Glu	Gln	Cys
			260					265					270		
Pro	Gly	Ile	Ser	Gly	Cys	Arg	Gly	Leu	Thr	Phe	Cys	Leu	Pro	Asp	Pro
		275					280					285			
Tyr	Gly	Cys	Ser	Cys	Gly	Ser	Gly	Trp	Arg	Gly	Ser	Gln	Cys	Gln	Glu
		290					295				300				
Ala	Cys	Ala	Pro	Gly	His	Phe	Gly	Ala	Asp	Cys	Arg	Leu	Gln	Cys	Gln
		305				310				315					320
Cys	Gln	Asn	Gly	Gly	Thr	Cys	Asp	Arg	Phe	Ser	Gly	Cys	Val	Cys	Pro
			325						330					335	
Ser	Gly	Trp	His	Gly	Val	His	Cys	Glu	Lys	Ser	Asp	Arg	Ile	Pro	Gln
			340					345					350		
Ile	Leu	Asn	Met	Ala	Ser	Glu	Leu	Glu	Phe	Asn	Leu	Glu	Thr	Met	Pro
		355					360					365			
Arg	Ile	Asn	Cys	Ala	Ala	Ala	Gly	Asn	Pro	Phe	Pro	Val	Arg	Gly	Ser
		370				375					380				
Ile	Glu	Leu	Arg	Lys	Pro	Asp	Gly	Thr	Val	Leu	Leu	Ser	Thr	Lys	Ala
		385			390					395					400
Ile	Val	Glu	Pro	Glu	Lys	Thr	Thr	Ala	Glu	Phe	Glu	Val	Pro	Arg	Leu
				405					410					415	
Val	Leu	Ala	Asp	Ser	Gly	Phe	Trp	Glu	Cys	Arg	Val	Ser	Thr	Ser	Gly
			420					425					430		
Gly	Gln	Asp	Ser	Arg	Arg	Phe	Lys	Val	Asn	Val	Lys	Val	Pro	Pro	Val
		435					440					445			
Pro	Leu	Ala	Ala	Pro	Arg	Leu	Leu	Thr	Lys	Gln	Ser	Arg	Gln	Leu	Val
		450				455					460				
Val	Ser	Pro	Leu	Val	Ser	Phe	Ser	Gly	Asp	Gly	Pro	Ile	Ser	Thr	Val
		465				470				475				480	
Arg	Leu	His	Tyr	Arg	Pro	Gln	Asp	Ser	Thr	Met	Asp	Trp	Ser	Thr	Ile
			485					490						495	
Val	Val	Asp	Pro	Ser	Glu	Asn	Val	Thr	Leu	Met	Asn	Leu	Arg	Pro	Lys
			500					505					510		
Thr	Gly	Tyr	Ser	Val	Arg	Val	Gln	Leu	Ser	Arg	Pro	Gly	Glu	Gly	Gly
		515					520					525			
Glu	Gly	Ala	Trp	Gly	Pro	Pro	Thr	Leu	Met	Thr	Thr	Asp	Cys	Pro	Glu
		530					535					540			
Pro	Leu	Leu	Gln	Pro	Trp	Leu	Glu	Gly	Trp	His	Val	Glu	Gly	Thr	Asp
		545			550					555					560

Arg	Leu	Arg	Val	Ser	Trp	Ser	Leu	Pro	Leu	Val	Pro	Gly	Pro	Leu	Val	565	570	575
Gly	Asp	Gly	Phe	Leu	Leu	Arg	Leu	Trp	Asp	Gly	Thr	Arg	Gly	Gln	Glu	580	585	590
Arg	Arg	Glu	Asn	Val	Ser	Ser	Pro	Gln	Ala	Arg	Thr	Ala	Leu	Leu	Thr	595	600	605
Gly	Leu	Thr	Pro	Gly	Thr	His	Tyr	Gln	Leu	Asp	Val	Gln	Leu	Tyr	His	610	615	620
Cys	Thr	Leu	Leu	Gly	Pro	Ala	Ser	Pro	Pro	Ala	His	Val	Leu	Leu	Pro	625	630	635
Pro	Ser	Gly	Pro	Pro	Ala	Pro	Arg	His	Leu	His	Ala	Gln	Ala	Leu	Ser	645	650	655
Asp	Ser	Glu	Ile	Gln	Leu	Thr	Trp	Lys	His	Pro	Glu	Ala	Leu	Pro	Gly	660	665	670
Pro	Ile	Ser	Lys	Tyr	Val	Val	Glu	Val	Gln	Val	Ala	Gly	Gly	Ala	Gly	675	680	685
Asp	Pro	Leu	Trp	Ile	Asp	Val	Asp	Arg	Pro	Glu	Glu	Thr	Ser	Thr	Ile	690	695	700
Ile	Arg	Gly	Leu	Asn	Ala	Ser	Thr	Arg	Tyr	Leu	Phe	Arg	Met	Arg	Ala	705	710	715
Ser	Ile	Gln	Gly	Leu	Gly	Asp	Trp	Ser	Asn	Thr	Val	Glu	Glu	Ser	Thr	725	730	735
Leu	Gly	Asn	Gly	Leu	Gln	Ala	Glu	Gly	Pro	Val	Gln	Glu	Ser	Arg	Ala	740	745	750
Ala	Glu	Glu	Gly	Leu	Asp	Gln	Gln	Leu	Ile	Leu	Ala	Val	Val	Gly	Ser	755	760	765
Val	Ser	Ala	Thr	Cys	Leu	Thr	Ile	Leu	Ala	Ala	Leu	Leu	Thr	Leu	Val	770	775	780
Cys	Ile	Arg	Arg	Ser	Cys	Leu	His	Arg	Arg	Arg	Thr	Phe	Thr	Tyr	Gln	785	790	795
Ser	Gly	Ser	Gly	Glu	Glu	Thr	Ile	Leu	Gln	Phe	Ser	Ser	Gly	Thr	Leu	805	810	815
Thr	Leu	Thr	Arg	Arg	Pro	Lys	Leu	Gln	Pro	Glu	Pro	Leu	Ser	Tyr	Pro	820	825	830
Val	Leu	Glu	Trp	Glu	Asp	Ile	Thr	Phe	Glu	Asp	Leu	Ile	Gly	Glu	Gly	835	840	845
Asn	Phe	Gly	Gln	Val	Ile	Arg	Ala	Met	Ile	Lys	Lys	Asp	Gly	Leu	Lys	850	855	860
Met	Asn	Ala	Ala	Ile	Lys	Met	Leu	Lys	Glu	Tyr	Ala	Ser	Glu	Asn	Asp	865	870	875
His	Arg	Asp	Phe	Ala	Gly	Glu	Leu	Glu	Val	Leu	Cys	Lys	Leu	Gly	His	885	890	895
His	Pro	Asn	Ile	Ile	Asn	Leu	Leu	Gly	Ala	Cys	Lys	Asn	Arg	Gly	Tyr	900	905	910
Leu	Tyr	Ile	Ala	Ile	Glu	Tyr	Ala	Pro	Tyr	Gly	Asn	Leu	Leu	Asp	Phe	915	920	925
Leu	Arg	Lys	Ser	Arg	Val	Leu	Glu	Thr	Asp	Pro	Ala	Phe	Ala	Arg	Glu	930	935	940
His	Gly	Thr	Ala	Ser	Thr	Leu	Ser	Ser	Arg	Gln	Leu	Leu	Arg	Phe	Ala	945	950	955
Ser	Asp	Ala	Ala	Asn	Gly	Met	Gln	Tyr	Leu	Ser	Glu	Lys	Gln	Phe	Ile	965	970	975
His	Arg	Asp	Leu	Ala	Ala	Arg	Asn	Val	Leu	Val	Gly	Glu	Asn	Leu	Ala	980	985	990
Ser	Lys	Ile	Ala	Asp	Phe	Gly	Leu	Ser	Arg	Gly	Glu	Glu	Val	Tyr	Val	995	1000	1005
Lys	Lys	Thr	Met	Gly	Arg	Leu	Pro	Val	Arg	Trp	Met	Ala	Ile	Glu	Ser	1010	1015	1020
Leu	Asn	Tyr	Ser	Val	Tyr	Thr	Thr	Lys	Ser	Asp	Val	Trp	Ser	Phe	Gly	1025	1030	1035

Val Leu Leu Trp Glu Ile Val Ser Leu Gly Gly Thr Pro Tyr Cys Gly
1045 1050 1055
Met Thr Cys Ala Glu Leu Tyr Glu Lys Leu Pro Gln Gly Tyr Arg Met
1060 1065 1070
Glu Gln Pro Arg Asn Cys Asp Asp Glu Val Tyr Glu Leu Met Arg Gln
1075 1080 1085
Cys Trp Arg Asp Arg Pro Tyr Glu Arg Pro Pro Phe Ala Gln Ile Ala
1090 1095 1100
Leu Gln Leu Gly Arg Met Leu Glu Ala Arg Lys Ala Tyr Val Asn Met
1105 1110 1115 1120
Ser Leu Phe Glu Asn Phe Thr Tyr Ala Gly Ile Asp Ala Thr Ala Glu
1125 1130 1135
Glu Ala

<210> 102
<211> 149
<212> PRT
<213> Homo sapiens

<400> 102
Met Pro Val Met Arg Leu Phe Pro Cys Phe Leu Gln Leu Leu Ala Gly
1 5 10 15
Leu Ala Leu Pro Ala Val Pro Pro Gln Trp Ala Leu Ser Ala Gly
20 25 30
Asn Gly Ser Ser Glu Val Glu Val Val Pro Phe Gln Glu Val Trp Gly
35 40 45
Arg Ser Tyr Cys Arg Ala Leu Glu Arg Leu Val Asp Val Val Ser Glu
50 55 60
Tyr Pro Ser Glu Val Glu His Met Phe Ser Pro Ser Cys Val Ser Leu
65 70 75 80
Leu Arg Cys Thr Gly Cys Cys Gly Asp Glu Asn Leu His Cys Val Pro
85 90 95
Val Glu Thr Ala Asn Val Thr Met Gln Leu Leu Lys Ile Arg Ser Gly
100 105 110
Asp Arg Pro Ser Tyr Val Glu Leu Thr Phe Ser Gln His Val Arg Cys
115 120 125
Glu Cys Arg Pro Leu Arg Glu Lys Met Lys Pro Glu Arg Cys Gly Asp
130 135 140
Ala Val Pro Arg Arg
145

<210> 103
<211> 1376
<212> PRT
<213> Homo sapiens

<400> 103
Met Glu Gly Asp Arg Val Ala Gly Arg Pro Val Leu Ser Ser Leu Pro
1 5 10 15
Val Leu Leu Leu Leu Gln Leu Leu Met Leu Arg Ala Ala Leu His
20 25 30
Pro Asp Glu Leu Phe Pro His Gly Glu Ser Trp Trp Asp Gln Leu Leu
35 40 45
Gln Glu Gly Asp Asp Val Lys Leu Ser Arg Gly Glu Ala Gly Glu Ser
50 55 60
Pro Ala Leu Leu Thr Lys Pro Pro Asp Ser Ala Thr Ser Thr Trp Ala Pro
65 70 75 80
Thr Ala Ser Ser Pro Leu Arg Thr Ser Pro Gly Lys Arg Ser Met Trp
85 90 95

Thr	Met	Ile	Ser	Pro	Pro	Thr	Ser	Arg	Pro	Ser	Pro	Leu	Phe	Trp	Arg		
			100					105					110				
Thr	Ser	Thr	Arg	Ala	Thr	Ala	Glu	Ala	Glu	Ser	Cys	Thr	Glu	Arg	Thr		
		115					120					125					
Pro	Pro	Pro	Gln	Cys	Trp	Ala	Trp	Pro	Pro	Ala	Met	Cys	Ala	Leu	Ala		
		130				135					140						
Ser	Arg	Ala	Leu	Arg	Ala	Phe	Tyr	Pro	His	Pro	Arg	Leu	Pro	Gly	His		
145					150					155					160		
Leu	Gly	Ala	Gly	Arg	Arg	Leu	Arg	Gly	Gly	Gln	Thr	Arg	Ala	Leu	Pro		
			165					170						175			
Ser	Gly	Glu	Leu	Asn	Thr	Phe	Gln	Ala	Val	Leu	Ala	Ser	Asp	Gly	Ser		
		180						185					190				
Asp	Ser	Tyr	Ala	Leu	Phe	Leu	Tyr	Pro	Ala	Asn	Gly	Leu	Gln	Phe	Leu		
		195					200					205					
Gly	Thr	Arg	Pro	Lys	Glu	Ser	Tyr	Asn	Val	Gln	Leu	Gln	Leu	Pro	Ala		
	210					215					220						
Arg	Val	Gly	Phe	Cys	Arg	Gly	Glu	Ala	Asp	Asp	Leu	Lys	Ser	Glu	Gly		
225					230					235					240		
Pro	Tyr	Phe	Ser	Leu	Thr	Ser	Thr	Glu	Gln	Ser	Val	Lys	Asn	Leu	Tyr		
			245					250						255			
Gln	Leu	Ser	Asn	Leu	Gly	Ile	Pro	Gly	Val	Trp	Ala	Phe	His	Ile	Gly		
			260					265									
Ser	Thr	Ser	Pro	Leu	Asp	Asn	Val	Arg	Pro	Ala	Ala	Val	Gly	Asp	Leu		
		275					280					285					
Ser	Ala	Ala	His	Ser	Ser	Val	Pro	Leu	Gly	Arg	Ser	Phe	Ser	His	Ala		
	290					295					300						
Thr	Ala	Leu	Glu	Ser	Asp	Tyr	Asn	Glu	Asp	Asn	Leu	Asp	Tyr	Tyr	Asp		
305					310					315					320		
Val	Asn	Glu	Glu	Glu	Ala	Glu	Tyr	Leu	Pro	Gly	Glu	Pro	Glu	Glu	Ala		
			325						330						335		
Leu	Asn	Gly	His	Ser	Ser	Ile	Asp	Val	Ser	Phe	Gln	Ser	Lys	Val	Asp		
			340				345						350				
Thr	Lys	Pro	Leu	Glu	Glu	Ser	Ser	Thr	Leu	Asp	Pro	His	Thr	Lys	Glu		
		355					360					365					
Gly	Thr	Ser	Leu	Gly	Glu	Val	Gly	Gly	Pro	Asp	Leu	Lys	Gly	Gln	Val		
	370					375					380						
Glu	Pro	Trp	Asp	Glu	Arg	Glu	Thr	Arg	Ser	Pro	Ala	Pro	Pro	Glu	Val		
385					390					395					400		
Asp	Arg	Asp	Ser	Leu	Ala	Pro	Ser	Trp	Glu	Thr	Pro	Pro	Pro	Tyr	Pro		
			405						410					415			
Glu	Asn	Gly	Ser	Ile	Gln	Pro	Tyr	Pro	Asp	Gly	Gly	Pro	Val	Pro	Ser		
			420					425					430				
Glu	Met	Asp	Val	Pro	Pro	Ala	His	Pro	Glu	Glu	Glu	Ile	Val	Leu	Arg		
		435					440					445					
Ser	Tyr	Pro	Ala	Ser	Gly	His	Thr	Thr	Pro	Leu	Ser	Arg	Gly	Thr	Tyr		
	450					455					460						
Glu	Val	Gly	Leu	Glu	Asp	Asn	Ile	Gly	Ser	Asn	Thr	Glu	Val	Phe	Thr		
465					470					475					480		
Tyr	Asn	Ala	Ala	Asn	Lys	Glu	Thr	Cys	Glu	His	Asn	His	Arg	Gln	Cys		
			485						490					495			
Ser	Arg	His	Ala	Phe	Cys	Thr	Asp	Tyr	Ala	Thr	Gly	Phe	Cys	Cys	His		
		500						505					510				
Cys	Gln	Ser	Lys	Phe	Tyr	Gly	Asn	Gly	Lys	His	Cys	Leu	Pro	Glu	Gly		
		515					520					525					
Ala	Pro	His	Arg	Val	Asn	Gly	Lys	Val	Ser	Gly	His	Leu	His	Val	Gly		
	530					535					540						
His	Thr	Pro	Val	His	Phe	Thr	Asp	Val	Asp	Leu	His	Ala	Tyr	Ile	Val		
545					550					555					560		
Gly	Asn	Asp	Gly	Arg	Ala	Tyr	Thr	Ala	Ile	Ser	His	Ile	Pro	Gln	Pro		
				565					570					575			

Ala	Ala	Gln	Ala	Leu	Leu	Pro	Leu	Thr	Pro	Ile	Gly	Gly	Leu	Phe	Gly
			580					585					590		
Trp	Leu	Phe	Ala	Leu	Glu	Lys	Pro	Gly	Ser	Glu	Asn	Gly	Phe	Ser	Leu
		595					600					605			
Ala	Gly	Ala	Ala	Phe	Thr	His	Asp	Met	Glu	Val	Thr	Phe	Tyr	Pro	Gly
	610					615					620				
Glu	Glu	Thr	Val	Arg	Ile	Thr	Gln	Thr	Ala	Glu	Gly	Leu	Asp	Pro	Glu
	625				630					635					640
Asn	Tyr	Leu	Ser	Ile	Lys	Thr	Asn	Ile	Gln	Gly	Gln	Val	Pro	Tyr	Val
				645					650					655	
Pro	Ala	Asn	Phe	Thr	Ala	His	Ile	Ser	Pro	Tyr	Lys	Glu	Leu	Tyr	His
			660					665					670		
Tyr	Ser	Asp	Ser	Thr	Val	Thr	Ser	Thr	Ser	Ser	Arg	Asp	Tyr	Ser	Leu
		675					680					685			
Thr	Phe	Gly	Ala	Ile	Asn	Gln	Thr	Trp	Ser	Tyr	Arg	Ile	His	Gln	Asn
	690					695					700				
Ile	Thr	Tyr	Gln	Val	Cys	Arg	His	Ala	Pro	Arg	His	Pro	Ser	Phe	Pro
	705				710				715						720
Thr	Thr	Gln	Gln	Leu	Asn	Val	Asp	Arg	Val	Phe	Ala	Leu	Tyr	Asn	Asp
			725						730					735	
Glu	Glu	Arg	Val	Leu	Arg	Phe	Ala	Val	Thr	Asn	Gln	Ile	Gly	Pro	Val
			740					745					750		
Lys	Glu	Asp	Ser	Asp	Pro	Thr	Pro	Val	Asn	Pro	Cys	Tyr	Asp	Gly	Ser
		755					760					765			
His	Met	Cys	Asp	Thr	Thr	Ala	Arg	Cys	His	Pro	Gly	Thr	Gly	Val	Asp
	770					775					780				
Tyr	Thr	Cys	Glu	Cys	Ala	Ser	Gly	Tyr	Gln	Gly	Asp	Gly	Arg	Asn	Cys
	785				790				795						800
Val	Asp	Glu	Asn	Glu	Cys	Ala	Thr	Gly	Phe	His	Arg	Cys	Gly	Pro	Asn
			805					810						815	
Ser	Val	Cys	Ile	Asn	Leu	Pro	Gly	Ser	Tyr	Arg	Cys	Glu	Cys	Arg	Ser
			820					825					830		
Gly	Tyr	Glu	Phe	Ala	Asp	Asp	Arg	His	Thr	Cys	Ile	Leu	Ile	Thr	Pro
		835					840					845			
Pro	Ala	Asn	Pro	Cys	Glu	Asp	Gly	Ser	His	Thr	Cys	Ala	Pro	Ala	Gly
		850				855					860				
Gln	Ala	Arg	Cys	Val	His	His	Gly	Gly	Ser	Thr	Phe	Ser	Cys	Ala	Cys
					870					875					880
Leu	Pro	Gly	Tyr	Ala	Gly	Asp	Gly	His	Gln	Cys	Thr	Asp	Val	Asp	Glu
				885					890					895	
Cys	Ser	Glu	Asn	Arg	Cys	His	Pro	Ala	Ala	Thr	Cys	Tyr	Asn	Thr	Pro
			900					905					910		
Gly	Ser	Phe	Ser	Cys	Arg	Cys	Gln	Pro	Gly	Tyr	Tyr	Gly	Asp	Gly	Phe
		915					920					925			
Gln	Cys	Ile	Pro	Asp	Ser	Thr	Ser	Ser	Leu	Thr	Pro	Cys	Glu	Gln	Gln
		930				935					940				
Gln	Arg	His	Ala	Gln	Ala	Gln	Tyr	Ala	Tyr	Pro	Gly	Ala	Arg	Phe	His
	945				950					955					960
Ile	Pro	Gln	Cys	Asp	Glu	Gln	Gly	Asn	Phe	Leu	Pro	Leu	Gln	Cys	His
				965					970					975	
Gly	Ser	Thr	Gly	Phe	Cys	Trp	Cys	Val	Asp	Pro	Asp	Gly	His	Glu	Val
			980					985					990		
Pro	Gly	Thr	Gln	Thr	Pro	Pro	Gly	Ser	Thr	Pro	Pro	His	Cys	Gly	Pro
			995				1000					1005			
Ser	Pro	Glu	Pro	Thr	Gln	Arg	Pro	Pro	Thr	Ile	Cys	Glu	Arg	Trp	Arg
			1010			1015					1020				
Glu	Asn	Leu	Leu	Glu	His	Tyr	Gly	Gly	Thr	Pro	Arg	Asp	Asp	Gln	Tyr
	1025				1030					1035					1040
Val	Pro	Gln	Cys	Asp	Asp	Leu	Gly	His	Phe	Ile	Pro	Leu	Gln	Cys	His
				1045					1050					1055	

Gly Gly Thr Glu Asp Arg Leu Ser Cys Phe Ala Gln Thr Val Ser Pro
115 120 125
Ala Glu Lys Trp Ser Val His Ile Ala Met His Pro Gln Val Asn Ile
130 135 140
Tyr Ser Val Thr Arg Lys Arg Tyr Ala His Leu Ser Ala Arg Pro Ala
145 150 155 160
Asp Glu Ile Ala Val Asp Arg Asp Val Trp Gly Val Asp Ser Leu
165 170 175
Ile Thr Leu Ala Phe Gln Asp Gln Arg Tyr Ser Val Gln Thr Ala Asp
180 185 190
His Arg Phe Leu Arg His Asp Gly Arg Leu Val Ala Arg Pro Glu Pro
195 200 205
Ala Thr Gly Tyr Thr Leu Glu Phe Arg Ser Gly Lys Val Ala Phe Arg
210 215 220
Asp Cys Glu Gly Arg Tyr Leu Ala Pro Ser Gly Pro Ser Gly Thr Leu
225 230 235 240
Lys Ala Gly Lys Ala Thr Lys Val Gly Lys Asp Glu Leu Phe Ala Leu
245 250 255
Glu Gln Ser Cys Ala Gln Val Val Leu Gln Ala Ala Asn Glu Arg Asn
260 265 270
Val Ser Thr Arg Gln Gly Met Asp Leu Ser Ala Asn Gln Asp Glu Glu
275 280 285
Thr Asp Gln Glu Thr Phe Gln Leu Glu Ile Asp Arg Asp Thr Lys Lys
290 295 300
Cys Ala Phe Arg Thr His Thr Gly Lys Tyr Trp Thr Leu Thr Ala Thr
305 310 315 320
Gly Gly Val Gln Ser Thr Ala Ser Ser Lys Asn Ala Ser Cys Tyr Phe
325 330 335
Asp Ile Glu Trp Arg Asp Arg Arg Ile Thr Leu Arg Ala Ser Asn Gly
340 345 350
Lys Phe Val Thr Ser Lys Lys Asn Gly Gln Leu Ala Ala Ser Val Glu
355 360 365
Thr Ala Gly Asp Ser Glu Leu Phe Leu Met Lys Leu Ile Asn Arg Pro
370 375 380
Ile Ile Val Phe Arg Gly Glu His Gly Phe Ile Gly Cys Arg Lys Val
385 390 395 400
Thr Gly Thr Leu Asp Ala Asn Arg Ser Ser Tyr Asp Val Phe Gln Leu
405 410 415
Glu Phe Asn Asp Gly Ala Tyr Asn Ile Lys Asp Ser Thr Gly Lys Tyr
420 425 430
Trp Thr Val Gly Ser Asp Ser Ala Val Thr Ser Ser Gly Asp Thr Pro
435 440 445
Val Asp Phe Phe Phe Glu Phe Cys Asp Tyr Asn Lys Val Ala Ile Lys
450 455 460
Val Gly Gly Arg Tyr Leu Lys Gly Asp His Ala Gly Val Leu Lys Ala
465 470 475 480
Ser Ala Glu Thr Val Asp Pro Ala Ser Leu Trp Glu Tyr
485 490

<210> 105
<211> 238
<212> PRT
<213> Homo sapiens

<400> 105
Met Leu Thr Thr Leu Leu Pro Ile Leu Leu Leu Ser Gly Trp Ala Phe
1 5 10 15
Cys Ser Gln Asp Ala Ser Asp Gly Leu Gln Arg Leu His Met Leu Gln
20 25 30
Ile Ser Tyr Phe Arg Asp Pro Tyr His Val Trp Tyr Gln Gly Asn Ala
35 40 45


```

Ser Leu Gly Gly His Leu Thr His Val Leu Glu Gly Pro Asp Thr Asn
 50          55          60
Thr Thr Ile Ile Gln Leu Gln Pro Leu Gln Glu Pro Glu Ser Trp Ala
 65          70          75          80
Arg Thr Gln Ser Gly Leu Gln Ser Tyr Leu Leu Gln Phe His Gly Leu
          85          90          95
Val Arg Leu Val His Gln Glu Arg Thr Leu Ala Phe Pro Leu Thr Ile
          100          105          110
Arg Cys Phe Leu Gly Cys Glu Leu Pro Pro Glu Gly Ser Arg Ala His
          115          120          125
Val Phe Phe Glu Val Ala Val Asn Gly Ser Ser Phe Val Ser Phe Arg
          130          135          140
Pro Glu Arg Ala Leu Trp Gln Ala Asp Thr Gln Val Thr Ser Gly Val
          145          150          155          160
Val Thr Phe Thr Leu Gln Gln Leu Asn Ala Tyr Asn Arg Thr Arg Tyr
          165          170          175
Glu Leu Arg Glu Phe Leu Glu Asp Thr Cys Val Gln Tyr Val Gln Lys
          180          185          190
His Ile Ser Ala Glu Asn Thr Lys Gly Ser Gln Thr Ser Arg Ser Tyr
          195          200          205
Thr Ser Leu Val Leu Gly Val Leu Val Gly Gly Phe Ile Ile Ala Gly
          210          215          220
Val Ala Val Gly Ile Phe Leu Cys Thr Gly Gly Arg Arg Cys
          225          230          235

```

```

<210> 106
<211> 646
<212> PRT
<213> Homo sapiens

```

```

<400> 106
Met Gly Leu Pro Arg Leu Val Cys Ala Phe Leu Leu Ala Ala Cys Cys
 1          5          10          15
Cys Cys Pro Arg Val Ala Gly Val Pro Gly Glu Ala Glu Gln Pro Ala
          20          25          30
Pro Glu Leu Val Glu Val Glu Val Gly Ser Thr Ala Leu Leu Lys Cys
          35          40          45
Gly Leu Ser Gln Ser Gln Gly Asn Leu Ser His Val Asp Trp Phe Ser
          50          55          60
Val His Lys Glu Lys Arg Thr Leu Ile Phe Arg Val Arg Gln Gly Gln
          65          70          75          80
Gly Gln Ser Glu Pro Gly Glu Tyr Glu Gln Arg Leu Ser Leu Gln Asp
          85          90          95
Arg Gly Ala Thr Leu Ala Leu Thr Gln Val Thr Pro Gln Asp Glu Arg
          100          105          110
Ile Phe Leu Cys Gln Gly Lys Arg Pro Arg Ser Gln Glu Tyr Arg Ile
          115          120          125
Gln Leu Arg Val Tyr Lys Ala Pro Glu Glu Pro Asn Ile Gln Val Asn
          130          135          140
Pro Leu Gly Ile Pro Val Asn Ser Lys Glu Pro Glu Glu Val Ala Thr
          145          150          155          160
Cys Val Gly Arg Asn Gly Tyr Pro Ile Pro Gln Val Ile Trp Tyr Lys
          165          170          175
Asn Gly Arg Pro Leu Lys Glu Glu Lys Asn Arg Val His Ile Gln Ser
          180          185          190
Ser Gln Thr Val Glu Ser Ser Gly Leu Tyr Thr Leu Gln Ser Ile Leu
          195          200          205
Lys Ala Gln Leu Val Lys Glu Asp Lys Asp Ala Gln Phe Tyr Cys Glu
          210          215          220
Leu Asn Tyr Arg Leu Pro Ser Gly Asn His Met Lys Glu Ser Arg Glu
          225          230          235          240

```

Val Thr Val Pro Val Phe Tyr Pro Thr Glu Lys Val Trp Leu Glu Val
 245 250 255
 Glu Pro Val Gly Met Leu Lys Glu Gly Asp Arg Val Glu Ile Arg Cys
 260 265 270
 Leu Ala Asp Gly Asn Pro Pro Pro His Phe Ser Ile Ser Lys Gln Asn
 275 280 285
 Pro Ser Thr Arg Glu Ala Glu Glu Thr Thr Asn Asp Asn Gly Val
 290 295 300
 Leu Val Leu Glu Pro Ala Arg Lys Glu His Ser Gly Arg Tyr Glu Cys
 305 310 315 320
 Gln Ala Trp Asn Leu Asp Thr Met Ile Ser Leu Ser Glu Pro Gln
 325 330 335
 Glu Leu Leu Val Asn Tyr Val Ser Asp Val Arg Val Ser Pro Ala Ala
 340 345 350
 Pro Glu Arg Gln Glu Gly Ser Ser Leu Thr Leu Thr Cys Glu Ala Glu
 355 360 365
 Ser Ser Gln Asp Leu Glu Phe Gln Trp Leu Arg Glu Glu Thr Asp Gln
 370 375 380
 Val Leu Glu Arg Gly Pro Val Leu Gln Leu His Asp Leu Lys Arg Glu
 385 390 395 400
 Ala Gly Gly Gly Tyr Arg Cys Val Ala Ser Val Pro Ser Ile Pro Gly
 405 410 415
 Leu Asn Arg Thr Gln Leu Val Lys Leu Ala Ile Phe Gly Pro Pro Trp
 420 425 430
 Met Ala Phe Lys Glu Arg Lys Val Trp Val Lys Glu Asn Met Val Leu
 435 440 445
 Asn Leu Ser Cys Glu Ala Ser Gly His Pro Arg Pro Thr Ile Ser Trp
 450 455 460
 Asn Val Asn Gly Thr Ala Ser Glu Gln Asp Gln Asp Pro Gln Arg Val
 465 470 475 480
 Leu Ser Thr Leu Asn Val Leu Val Thr Pro Glu Leu Leu Glu Thr Gly
 485 490 495
 Val Glu Cys Thr Ala Ser Asn Asp Leu Gly Lys Asn Thr Ser Ile Leu
 500 505 510
 Phe Leu Glu Leu Val Asn Leu Thr Thr Leu Thr Pro Asp Ser Asn Thr
 515 520 525
 Thr Thr Gly Leu Ser Thr Thr Ala Ser Pro His Thr Arg Ala Asn
 530 535 540
 Ser Thr Ser Thr Glu Arg Lys Leu Pro Glu Pro Glu Ser Arg Gly Val
 545 550 555 560
 Val Ile Val Ala Val Ile Val Cys Ile Leu Val Leu Ala Val Leu Gly
 565 570 575
 Ala Val Leu Tyr Phe Leu Tyr Lys Lys Gly Lys Leu Pro Cys Arg Arg
 580 585 590
 Ser Gly Lys Gln Glu Ile Thr Leu Pro Pro Ser Arg Lys Thr Glu Leu
 595 600 605
 Val Val Glu Val Lys Ser Asp Lys Leu Pro Glu Glu Met Gly Leu Leu
 610 615 620
 Gln Gly Ser Ser Gly Asp Lys Arg Ala Pro Gly Asp Gln Gly Glu Lys
 625 630 635 640
 Tyr Ile Asp Leu Arg His
 645

<210> 107
 <211> 212
 <212> PRT
 <213> Homo sapiens

<400> 107
 Met Asp Tyr Leu Leu Met Ile Phe Ser Leu Leu Phe Val Ala Cys Gln
 1 5 10 15

Gly Ala Pro Glu Thr Ala Val Leu Gly Ala Glu Leu Ser Ala Val Gly
 20 25 30
 Glu Asn Gly Gly Glu Lys Pro Thr Pro Ser Pro Pro Trp Arg Leu Arg
 35 40 45
 Arg Ser Lys Arg Cys Ser Cys Ser Leu Met Asp Lys Glu Cys Val
 50 55 60
 Tyr Phe Cys His Leu Asp Ile Ile Trp Val Asn Thr Pro Glu His Val
 65 70 75 80
 Val Pro Tyr Gly Leu Gly Ser Pro Arg Ser Lys Arg Ala Leu Glu Asn
 85 90 95
 Leu Leu Pro Thr Lys Ala Thr Asp Arg Glu Asn Arg Cys Gln Cys Ala
 100 105 110
 Ser Gln Lys Asp Lys Lys Cys Trp Asn Phe Cys Gln Ala Gly Lys Glu
 115 120 125
 Leu Arg Ala Glu Asp Ile Met Glu Lys Asp Trp Asn Asn His Lys Lys
 130 135 140
 Gly Lys Asp Cys Ser Lys Leu Gly Lys Lys Cys Ile Tyr Gln Gln Leu
 145 150 155 160
 Val Arg Gly Arg Lys Ile Arg Arg Ser Ser Glu Glu His Leu Arg Gln
 165 170 175
 Thr Arg Ser Glu Thr Met Arg Asn Ser Val Lys Ser Ser Phe His Asp
 180 185 190
 Pro Lys Leu Lys Gly Lys Pro Ser Arg Glu Arg Tyr Val Thr His Asn
 195 200 205
 Arg Ala His Trp
 210

<210> 108
 <211> 675
 <212> PRT
 <213> Homo sapiens

<400> 108
 Met Asp Thr Lys Ser Ile Leu Glu Glu Leu Leu Lys Arg Ser Gln
 1 5 10 15
 Gln Lys Lys Lys Met Ser Pro Asn Asn Tyr Lys Glu Arg Leu Phe Val
 20 25 30
 Leu Thr Lys Thr Asn Leu Ser Tyr Tyr Glu Tyr Asp Lys Met Lys Arg
 35 40 45
 Gly Ser Arg Lys Gly Ser Ile Glu Ile Lys Lys Ile Arg Cys Val Glu
 50 55 60
 Lys Val Asn Leu Glu Glu Gln Thr Pro Val Glu Arg Gln Tyr Pro Phe
 65 70 75 80
 Gln Ile Val Tyr Lys Asp Gly Leu Leu Tyr Val Tyr Ala Ser Asn Glu
 85 90 95
 Glu Ser Arg Ser Gln Trp Leu Lys Ala Leu Gln Lys Glu Ile Arg Gly
 100 105 110
 Asn Pro His Leu Leu Val Lys Tyr His Ser Gly Phe Phe Val Asp Gly
 115 120 125
 Lys Phe Leu Cys Cys Gln Gln Ser Cys Lys Ala Ala Pro Gly Cys Thr
 130 135 140
 Leu Trp Glu Ala Tyr Ala Asn Leu His Thr Ala Val Asn Glu Glu Lys
 145 150 155 160
 His Arg Val Pro Thr Phe Pro Asp Arg Val Leu Lys Ile Pro Arg Ala
 165 170 175
 Val Pro Val Leu Lys Met Asp Ala Pro Ser Ser Ser Thr Thr Leu Ala
 180 185 190
 Gln Tyr Asp Asn Glu Ser Lys Lys Asn Tyr Gly Ser Gln Pro Pro Ser
 195 200 205
 Ser Ser Thr Ser Leu Ala Gln Tyr Asp Ser Asn Ser Lys Lys Ile Tyr
 210 215 220

Gly	Ser	Gln	Pro	Asn	Phe	Asn	Met	Gln	Tyr	Ile	Pro	Arg	Glu	Asp	Phe
225				230						235					240
Pro	Asp	Trp	Trp	Gln	Val	Arg	Lys	Leu	Lys	Ser	Ser	Ser	Ser	Ser	Glu
				245					250					255	
Asp	Val	Ala	Ser	Ser	Asn	Gln	Lys	Glu	Arg	Asn	Val	Asn	His	Thr	Thr
			260					265					270		
Ser	Lys	Ile	Ser	Trp	Glu	Phe	Pro	Glu	Ser	Ser	Ser	Ser	Glu	Glu	Glu
		275					280					285			
Glu	Asn	Leu	Asp	Asp	Tyr	Asp	Trp	Phe	Ala	Gly	Asn	Ile	Ser	Arg	Ser
	290					295					300				
Gln	Ser	Glu	Gln	Leu	Leu	Arg	Gln	Lys	Gly	Lys	Glu	Gly	Ala	Phe	Met
305					310					315				320	
Val	Arg	Asn	Ser	Ser	Gln	Val	Gly	Met	Tyr	Thr	Val	Ser	Leu	Phe	Ser
				325					330					335	
Lys	Ala	Val	Asn	Asp	Lys	Lys	Gly	Thr	Val	Lys	His	Tyr	His	Val	His
			340					345					350		
Thr	Asn	Ala	Glu	Asn	Lys	Leu	Tyr	Leu	Ala	Glu	Asn	Tyr	Cys	Phe	Asp
		355				360						365			
Ser	Ile	Pro	Lys	Leu	Ile	His	Tyr	His	Gln	His	Asn	Ser	Ala	Gly	Met
	370					375					380				
Ile	Thr	Arg	Leu	Arg	His	Pro	Val	Ser	Thr	Lys	Ala	Asn	Lys	Val	Pro
385					390					395					400
Asp	Ser	Val	Ser	Leu	Gly	Asn	Gly	Ile	Trp	Glu	Leu	Lys	Arg	Glu	Glu
				405					410					415	
Ile	Thr	Leu	Leu	Lys	Glu	Leu	Gly	Ser	Gly	Gln	Phe	Gly	Val	Val	Gln
		420					425					430			
Leu	Gly	Lys	Trp	Lys	Gly	Gln	Tyr	Asp	Val	Ala	Val	Lys	Met	Ile	Lys
		435					440					445			
Glu	Gly	Ser	Met	Ser	Glu	Asp	Glu	Phe	Phe	Gln	Glu	Ala	Gln	Thr	Met
	450					455					460				
Met	Lys	Leu	Ser	His	Pro	Lys	Leu	Val	Lys	Phe	Tyr	Gly	Val	Cys	Ser
465					470					475				480	
Lys	Glu	Tyr	Pro	Ile	Tyr	Ile	Val	Thr	Glu	Tyr	Ile	Ser	Asn	Gly	Cys
				485					490					495	
Leu	Leu	Asn	Tyr	Leu	Arg	Ser	His	Gly	Lys	Gly	Leu	Glu	Pro	Ser	Gln
		500						505					510		
Leu	Leu	Glu	Met	Cys	Tyr	Asp	Val	Cys	Glu	Gly	Met	Ala	Phe	Leu	Glu
		515					520					525			
Ser	His	Gln	Phe	Ile	His	Arg	Asp	Leu	Ala	Ala	Arg	Asn	Cys	Leu	Val
	530					535					540				
Asp	Arg	Asp	Leu	Cys	Val	Lys	Val	Ser	Asp	Phe	Gly	Met	Thr	Arg	Tyr
545					550					555				560	
Val	Leu	Asp	Asp	Gln	Tyr	Val	Ser	Ser	Val	Gly	Thr	Lys	Phe	Pro	Val
			565						570					575	
Lys	Trp	Ser	Ala	Pro	Glu	Val	Phe	His	Tyr	Phe	Lys	Tyr	Ser	Ser	Lys
			580					585					590		
Ser	Asp	Val	Trp	Ala	Phe	Gly	Ile	Leu	Met	Trp	Glu	Val	Phe	Ser	Leu
		595					600					605			
Gly	Lys	Gln	Pro	Tyr	Asp	Leu	Tyr	Asp	Asn	Ser	Gln	Val	Val	Leu	Lys
	610					615					620				
Val	Ser	Gln	Gly	His	Arg	Leu	Tyr	Arg	Pro	His	Leu	Ala	Ser	Asp	Thr
625					630					635				640	
Ile	Tyr	Gln	Ile	Met	Tyr	Ser	Cys	Trp	His	Glu	Leu	Pro	Glu	Lys	Arg
				645					650					655	
Pro	Thr	Phe	Gln	Gln	Leu	Leu	Ser	Ser	Ile	Glu	Pro	Leu	Arg	Glu	Lys
			660					665					670		
Asp	Lys	His													
		675													

<210> 109
 <211> 604
 <212> PRT
 <213> Homo sapiens

<400> 109

```

Met Leu Ala Arg Ala Leu Leu Leu Cys Ala Val Leu Ala Leu Ser His
 1          5          10          15
Thr Ala Asn Pro Cys Cys Ser His Pro Cys Gln Asn Arg Gly Val Cys
 20          25          30
Met Ser Val Gly Phe Asp Gln Tyr Lys Cys Asp Cys Thr Arg Thr Gly
 35          40          45
Phe Tyr Gly Glu Asn Cys Ser Thr Pro Glu Phe Leu Thr Arg Ile Lys
 50          55          60
Leu Phe Leu Lys Pro Thr Pro Asn Thr Val His Tyr Ile Leu Thr His
 65          70          75          80
Phe Lys Gly Phe Trp Asn Val Val Asn Asn Ile Pro Phe Leu Arg Asn
 85          90          95
Ala Ile Met Ser Tyr Val Leu Thr Ser Arg Ser His Leu Ile Asp Ser
 100          105          110
Pro Pro Thr Tyr Asn Ala Asp Tyr Gly Tyr Lys Ser Trp Glu Ala Phe
 115          120          125
Ser Asn Leu Ser Tyr Tyr Thr Arg Ala Leu Pro Pro Val Pro Asp Asp
 130          135          140
Cys Pro Thr Pro Leu Gly Val Lys Gly Lys Lys Gln Leu Pro Asp Ser
 145          150          155          160
Asn Glu Ile Val Glu Lys Leu Leu Leu Arg Arg Lys Phe Ile Pro Asp
 165          170          175
Pro Gln Gly Ser Asn Met Met Phe Ala Phe Phe Ala Gln His Phe Thr
 180          185          190
His Gln Phe Phe Lys Thr Asp His Lys Arg Gly Pro Ala Phe Thr Asn
 195          200          205
Gly Leu Gly His Gly Val Asp Leu Asn His Ile Tyr Gly Glu Thr Leu
 210          215          220
Ala Arg Gln Arg Lys Leu Arg Leu Phe Lys Asp Gly Lys Met Lys Tyr
 225          230          235          240
Gln Ile Ile Asp Gly Glu Met Tyr Pro Thr Val Lys Asp Thr Gln
 245          250          255
Ala Glu Met Ile Tyr Pro Pro Gln Val Pro Glu His Leu Arg Phe Ala
 260          265          270
Val Gly Gln Glu Val Phe Gly Leu Val Pro Gly Leu Met Met Tyr Ala
 275          280          285          290
Thr Ile Trp Leu Arg Glu His Asn Arg Val Cys Asp Val Leu Lys Gln
 295          300
Glu His Pro Glu Trp Gly Asp Glu Gln Leu Phe Gln Thr Ser Arg Leu
 305          310          315          320
Ile Leu Ile Gly Glu Thr Ile Lys Ile Val Ile Glu Asp Tyr Val Gln
 325          330          335
His Leu Ser Gly Tyr His Phe Lys Leu Lys Phe Asp Pro Glu Leu Leu
 340          345          350
Phe Asn Lys Gln Phe Gln Tyr Gln Asn Arg Ile Ala Ala Glu Phe Asn
 355          360          365
Thr Leu Tyr His Trp His Pro Leu Leu Pro Asp Thr Phe Gln Ile His
 370          375          380
Asp Gln Lys Tyr Asn Tyr Gln Gln Phe Ile Tyr Asn Asn Ser Ile Leu
 385          390          395          400
Leu Glu His Gly Ile Thr Gln Phe Val Glu Ser Phe Thr Arg Gln Ile
 405          410          415
Ala Gly Arg Val Ala Gly Gly Arg Asn Val Pro Pro Ala Val Gln Lys
 420          425          430

```

Val Ser Gln Ala Ser Ile Asp Gln Ser Arg Gln Met Lys Tyr Gln Ser
 435 440 445
 Phe Asn Glu Tyr Arg Lys Arg Phe Met Leu Lys Pro Tyr Glu Ser Phe
 450 455 460
 Glu Glu Leu Thr Gly Glu Lys Glu Met Ser Ala Glu Leu Glu Ala Leu
 465 470 475 480
 Tyr Gly Asp Ile Asp Ala Val Glu Leu Tyr Pro Ala Leu Leu Val Glu
 485 490 495
 Lys Pro Arg Pro Asp Ala Ile Phe Gly Glu Thr Met Val Glu Val Gly
 500 505 510
 Ala Pro Phe Ser Leu Lys Gly Leu Met Gly Asn Val Ile Cys Ser Pro
 515 520 525
 Ala Tyr Trp Lys Pro Ser Thr Phe Gly Gly Glu Val Gly Phe Gln Ile
 530 535 540
 Ile Asn Thr Ala Ser Ile Gln Ser Leu Ile Cys Asn Asn Val Lys Gly
 545 550 555 560
 Cys Pro Phe Thr Ser Phe Ser Val Pro Asp Pro Glu Leu Ile Lys Thr
 565 570 575
 Val Thr Ile Asn Ala Ser Ser Ser Arg Ser Gly Leu Asp Asp Ile Asn
 580 585 590
 Pro Thr Val Leu Leu Lys Glu Arg Ser Thr Glu Leu
 595 600

<210> 110
 <211> 715
 <212> PRT
 <213> Homo sapiens

<400> 110
 Met Val Gln Lys Tyr Gln Ser Pro Val Arg Val Tyr Lys Tyr Pro Phe
 1 5 10 15
 Glu Leu Ile Met Ala Ala Tyr Glu Arg Arg Phe Pro Thr Cys Pro Leu
 20 25 30
 Ile Pro Met Phe Val Gly Ser Asp Thr Val Ser Glu Phe Lys Ser Glu
 35 40 45
 Asp Gly Ala Ile His Val Ile Glu Arg Arg Cys Lys Leu Asp Val Asp
 50 55 60
 Ala Pro Arg Leu Leu Lys Lys Ile Ala Gly Val Asp Tyr Val Tyr Phe
 65 70 75 80
 Val Gln Lys Asn Ser Leu Asn Ser Arg Glu Arg Thr Leu His Ile Glu
 85 90 95
 Ala Tyr Asn Glu Thr Phe Ser Asn Arg Val Ile Ile Asn Glu His Cys
 100 105 110
 Cys Tyr Thr Val His Pro Glu Asn Glu Asp Trp Thr Cys Phe Glu Gln
 115 120 125
 Ser Ala Ser Leu Asp Ile Lys Ser Phe Phe Gly Phe Glu Ser Thr Val
 130 135 140
 Glu Lys Ile Ala Met Lys Gln Tyr Thr Ser Asn Ile Lys Lys Gly Lys
 145 150 155 160
 Glu Ile Ile Glu Tyr Tyr Leu Arg Gln Leu Glu Glu Glu Gly Ile Thr
 165 170 175
 Phe Val Pro Arg Trp Ser Pro Pro Ser Ile Thr Pro Ser Ser Glu Thr
 180 185 190
 Ser Ser Ser Ser Ser Lys Lys Gln Ala Ala Ser Met Ala Val Val Ile
 195 200 205
 Pro Glu Ala Ala Leu Lys Glu Gly Leu Ser Gly Asp Ala Leu Ser Ser
 210 215 220
 Pro Ser Ala Pro Glu Pro Val Val Gly Thr Pro Asp Asp Lys Leu Asp
 225 230 235 240
 Ala Asp His Ile Lys Arg Tyr Leu Gly Asp Leu Thr Pro Leu Gln Glu
 245 250 255

Ser Cys Leu Ile Arg Leu Arg Gln Trp Leu Gln Glu Thr His Lys Gly
260 265 270
Lys Ile Pro Lys Asp Glu His Ile Leu Arg Phe Leu Arg Ala Arg Asp
275 280 285
Phe Asn Ile Asp Lys Ala Arg Glu Ile Met Cys Gln Ser Leu Thr Trp
290 295 300
Arg Lys Gln His Gln Val Asp Tyr Ile Leu Glu Thr Trp Thr Pro Pro
305 310 315 320
Gln Val Leu Gln Asp Tyr Tyr Ala Gly Gly Trp His His His Asp Lys
325 330 335
Asp Gly Arg Pro Leu Tyr Val Leu Arg Leu Gly Gln Met Asp Thr Lys
340 345 350
Gly Leu Val Arg Ala Leu Gly Glu Glu Ala Leu Leu Arg Tyr Val Leu
355 360 365
Ser Val Asn Glu Glu Arg Leu Arg Arg Cys Glu Glu Asn Thr Lys Val
370 375 380
Phe Gly Arg Pro Ile Ser Ser Trp Thr Cys Leu Val Asp Leu Glu Gly
385 390 395 400
Leu Asn Met Arg His Leu Trp Arg Pro Gly Val Lys Ala Leu Leu Arg
405 410 415
Ile Ile Glu Val Val Glu Ala Asn Tyr Pro Glu Thr Leu Gly Arg Leu
420 425 430
Leu Ile Leu Arg Ala Pro Arg Val Phe Pro Val Leu Trp Thr Leu Val
435 440 445
Ser Pro Phe Ile Asp Asp Asn Thr Arg Arg Lys Phe Leu Ile Tyr Ala
450 455 460
Gly Asn Asp Tyr Gln Gly Pro Gly Gly Leu Leu Asp Tyr Ile Asp Lys
465 470 475 480
Glu Ile Ile Pro Asp Phe Leu Ser Gly Glu Cys Met Cys Glu Val Pro
485 490 495
Glu Gly Gly Leu Val Pro Lys Ser Leu Tyr Arg Thr Ala Glu Glu Leu
500 505 510
Glu Asn Glu Asp Leu Lys Leu Trp Thr Glu Thr Ile Tyr Gln Ser Ala
515 520 525
Ser Val Phe Lys Gly Ala Pro His Glu Ile Leu Ile Gln Ile Val Asp
530 535 540
Ala Ser Ser Val Ile Thr Trp Asp Phe Asp Val Cys Lys Gly Asp Ile
545 550 555 560
Val Phe Asn Ile Tyr His Ser Lys Arg Ser Pro Gln Pro Pro Lys Lys
565 570 575
Asp Ser Leu Gly Ala His Ser Ile Thr Ser Pro Gly Gly Asn Asn Val
580 585 590
Gln Leu Ile Asp Lys Val Trp Gln Leu Gly Arg Asp Tyr Ser Met Val
595 600 605
Glu Ser Pro Leu Ile Cys Lys Glu Gly Glu Ser Val Gln Gly Ser His
610 615 620
Val Thr Arg Trp Pro Gly Phe Tyr Ile Leu Gln Trp Lys Phe His Ser
625 630 635 640
Met Pro Ala Cys Ala Ala Ser Ser Leu Pro Arg Val Asp Asp Val Leu
645 650 655
Ala Ser Leu Gln Val Ser Ser His Lys Cys Lys Val Met Tyr Thr Thr
660 665 670
Glu Val Ile Gly Ser Glu Asp Phe Arg Gly Ser Met Thr Ser Leu Glu
675 680 685
Ser Ser His Ser Gly Phe Ser Gln Leu Ser Ala Ala Thr Thr Ser Ser
690 695 700
Ser Gln Ser His Ser Ser Ser Met Ile Ser Arg
705 710 715

<210> 111
 <211> 532
 <212> PRT
 <213> Homo sapiens

<400> 111

```

Met Ala Pro Ser Ser Pro Arg Pro Ala Leu Pro Ala Leu Leu Val Leu
 1          5          10          15
Leu Gly Ala Leu Phe Pro Gly Pro Gly Asn Ala Gln Thr Ser Val Ser
 20          25          30
Pro Ser Lys Val Ile Leu Pro Arg Gly Gly Ser Val Leu Val Thr Cys
 35          40          45
Ser Thr Ser Cys Asp Gln Pro Lys Leu Leu Gly Ile Glu Thr Pro Leu
 50          55          60
Pro Lys Lys Glu Leu Leu Leu Pro Gly Asn Asn Arg Lys Val Tyr Glu
 65          70          75          80
Leu Ser Asn Val Gln Glu Asp Ser Gln Pro Met Cys Tyr Ser Asn Cys
 85          90          95
Pro Asp Gly Gln Ser Thr Ala Lys Thr Phe Leu Thr Val Tyr Trp Thr
 100          105          110
Pro Glu Arg Val Glu Leu Ala Pro Leu Pro Ser Trp Gln Pro Val Gly
 115          120          125
Lys Asn Leu Thr Leu Arg Cys Gln Val Glu Gly Gly Ala Pro Arg Ala
 130          135          140
Asn Leu Thr Val Val Leu Leu Arg Gly Glu Lys Glu Leu Lys Arg Glu
 145          150          155          160
Pro Ala Val Gly Glu Pro Ala Glu Val Thr Thr Thr Val Leu Val Arg
 165          170          175
Arg Asp His His Gly Ala Asn Phe Ser Cys Arg Thr Glu Leu Asp Leu
 180          185          190
Arg Pro Gln Gly Leu Glu Leu Phe Glu Asn Thr Ser Ala Pro Tyr Gln
 195          200          205
Leu Gln Thr Phe Val Leu Pro Ala Thr Pro Pro Gln Leu Val Ser Pro
 210          215          220
Arg Val Leu Glu Val Asp Thr Gln Gly Thr Val Val Cys Ser Leu Asp
 225          230          235          240
Gly Leu Phe Pro Val Ser Glu Ala Gln Val His Leu Ala Leu Gly Asp
 245          250          255
Gln Arg Leu Asn Pro Thr Val Thr Tyr Gly Asn Asp Ser Phe Ser Ala
 260          265          270
Lys Ala Ser Val Ser Val Thr Ala Glu Asp Glu Gly Thr Gln Arg Leu
 275          280          285
Thr Cys Ala Val Ile Leu Gly Asn Gln Ser Gln Glu Thr Leu Gln Thr
 290          295          300
Val Thr Ile Tyr Ser Phe Pro Ala Pro Asn Val Ile Leu Thr Lys Pro
 305          310          315          320
Glu Val Ser Glu Gly Thr Glu Val Thr Val Lys Cys Glu Ala His Pro
 325          330          335
Arg Ala Lys Val Thr Leu Asn Gly Val Pro Ala Gln Pro Leu Gly Pro
 340          345          350
Arg Ala Gln Leu Leu Leu Lys Ala Thr Pro Glu Asp Asn Gly Arg Ser
 355          360          365
Phe Ser Cys Ser Ala Thr Leu Glu Val Ala Gly Gln Leu Ile His Lys
 370          375          380
Asn Gln Thr Arg Glu Leu Arg Val Leu Tyr Gly Pro Arg Leu Asp Glu
 385          390          395          400
Arg Asp Cys Pro Gly Asn Trp Thr Trp Pro Glu Asn Ser Gln Gln Thr
 405          410          415
Pro Met Cys Gln Ala Trp Gly Asn Pro Leu Pro Glu Leu Lys Cys Leu
 420          425          430

```

10021560.120001

Lys Asp Gly Thr Phe Pro Leu Pro Ile Gly Glu Ser Val Thr Val Thr
 435 440 445
 Arg Asp Leu Glu Gly Thr Tyr Leu Cys Arg Ala Arg Ser Thr Gln Gly
 450 455 460
 Glu Val Thr Arg Glu Val Thr Val Asn Val Leu Ser Pro Arg Tyr Glu
 465 470 475 480
 Ile Val Ile Ile Thr Val Val Ala Ala Val Ile Met Gly Thr Ala
 485 490 495
 Gly Leu Ser Thr Tyr Leu Tyr Asn Arg Gln Arg Lys Ile Lys Lys Tyr
 500 505 510
 Arg Leu Gln Gln Ala Gln Lys Gly Thr Pro Met Lys Pro Asn Thr Gln
 515 520 525
 Ala Thr Pro Pro
 530

<210> 112
 <211> 1124
 <212> PRT
 <213> Homo sapiens

<400> 112
 Met Asp Ser Leu Ala Ser Leu Val Leu Cys Gly Val Ser Leu Leu Leu
 1 5 10 15
 Ser Gly Thr Val Glu Gly Ala Met Asp Leu Ile Leu Ile Asn Ser Leu
 20 25 30
 Pro Leu Val Ser Asp Ala Glu Thr Ser Leu Thr Cys Ile Ala Ser Gly
 35 40 45
 Trp Arg Pro His Glu Pro Ile Thr Ile Gly Arg Asp Phe Glu Ala Leu
 50 55 60
 Met Asn Gln His Gln Asp Pro Leu Glu Val Thr Gln Asp Val Thr Arg
 65 70 75 80
 Glu Trp Ala Lys Lys Val Val Trp Lys Arg Glu Lys Ala Ser Lys Ile
 85 90 95
 Asn Gly Ala Tyr Phe Cys Glu Gly Arg Val Arg Gly Glu Ala Ile Arg
 100 105 110
 Ile Arg Thr Met Lys Met Arg Gln Gln Ala Ser Phe Leu Pro Ala Thr
 115 120 125
 Leu Thr Met Thr Val Asp Lys Gly Asp Asn Val Asn Ile Ser Phe Lys
 130 135 140
 Lys Val Leu Ile Lys Glu Asp Ala Val Ile Tyr Lys Asn Gly Ser
 145 150 155 160
 Phe Ile His Ser Val Pro Arg His Glu Val Pro Asp Ile Leu Glu Val
 165 170 175
 His Leu Pro His Ala Gln Pro Gln Asp Ala Gly Val Tyr Ser Ala Arg
 180 185 190
 Tyr Ile Gly Gly Asn Leu Phe Thr Ser Ala Phe Thr Arg Leu Ile Val
 195 200 205
 Arg Arg Cys Glu Ala Gln Lys Trp Gly Pro Glu Cys Asn His Leu Cys
 210 215 220
 Thr Ala Cys Met Asn Asn Gly Val Cys His Glu Asp Thr Gly Glu Cys
 225 230 235 240
 Ile Cys Pro Pro Gly Phe Met Gly Arg Thr Cys Glu Lys Ala Cys Glu
 245 250 255
 Leu His Thr Phe Gly Arg Thr Cys Lys Glu Arg Cys Ser Gly Gln Glu
 260 265 270
 Gly Cys Lys Ser Tyr Val Phe Cys Leu Pro Asp Pro Tyr Gly Cys Ser
 275 280 285
 Cys Ala Thr Gly Trp Lys Gly Leu Gln Cys Asn Glu Ala Cys His Pro
 290 295 300
 Gly Phe Tyr Gly Pro Asp Cys Lys Leu Arg Cys Ser Cys Asn Asn Gly
 305 310 315 320

Glu	Met	Cys	Asp	Arg	Phe	Gln	Gly	Cys	Leu	Cys	Ser	Pro	Gly	Trp	Gln	
			325						330					335		
Gly	Leu	Gln	Cys	Glu	Arg	Glu	Gly	Ile	Pro	Arg	Met	Thr	Pro	Lys	Ile	
		340					345						350			
Val	Asp	Leu	Pro	Asp	His	Ile	Glu	Val	Asn	Ser	Gly	Lys	Phe	Asn	Pro	
		355					360					365				
Ile	Cys	Lys	Ala	Ser	Gly	Trp	Pro	Leu	Pro	Thr	Asn	Glu	Glu	Met	Thr	
	370				375						380					
Leu	Val	Lys	Pro	Asp	Gly	Thr	Val	Leu	His	Pro	Lys	Asp	Phe	Asn	His	
	385				390					395				400		
Thr	Asp	His	Phe	Ser	Val	Ala	Ile	Phe	Thr	Ile	His	Arg	Ile	Leu	Pro	
			405						410				415			
Pro	Asp	Ser	Gly	Val	Trp	Val	Cys	Ser	Val	Asn	Thr	Val	Ala	Gly	Met	
			420					425					430			
Val	Glu	Lys	Pro	Phe	Asn	Ile	Ser	Val	Lys	Val	Leu	Pro	Lys	Pro	Leu	
	435						440					445				
Asn	Ala	Pro	Asn	Val	Ile	Asp	Thr	Gly	His	Asn	Phe	Ala	Val	Ile	Asn	
	450					455					460					
Ile	Ser	Ser	Glu	Pro	Tyr	Phe	Gly	Asp	Gly	Pro	Ile	Lys	Ser	Lys	Lys	
	465				470					475					480	
Leu	Leu	Tyr	Lys	Pro	Val	Asn	His	Tyr	Glu	Ala	Trp	Gln	His	Ile	Gln	
			485						490					495		
Val	Thr	Asn	Glu	Ile	Val	Thr	Leu	Asn	Tyr	Leu	Glu	Pro	Arg	Thr	Glu	
		500						505					510			
Tyr	Glu	Leu	Cys	Val	Gln	Leu	Val	Arg	Arg	Gly	Glu	Gly	Gly	Glu	Gly	
	515						520					525				
His	Pro	Gly	Pro	Val	Arg	Arg	Phe	Thr	Thr	Ala	Ser	Ile	Gly	Leu	Pro	
	530					535					540					
Pro	Pro	Arg	Gly	Leu	Asn	Leu	Leu	Pro	Lys	Ser	Gln	Thr	Thr	Leu	Asn	
	545				550					555					560	
Leu	Thr	Trp	Gln	Pro	Ile	Phe	Pro	Ser	Ser	Glu	Asp	Asp	Phe	Tyr	Val	
			565						570					575		
Glu	Val	Glu	Arg	Arg	Ser	Val	Gln	Lys	Ser	Asp	Gln	Gln	Asn	Ile	Lys	
		580						585					590			
Val	Pro	Gly	Asn	Leu	Thr	Ser	Val	Leu	Leu	Asn	Asn	Leu	His	Pro	Arg	
		595					600					605				
Glu	Gln	Tyr	Val	Val	Arg	Ala	Arg	Val	Asn	Thr	Lys	Ala	Gln	Gly	Glu	
	610					615						620				
Trp	Ser	Glu	Asp	Leu	Thr	Ala	Trp	Thr	Leu	Ser	Asp	Ile	Leu	Pro	Pro	
	625				630					635					640	
Gln	Pro	Glu	Asn	Ile	Lys	Ile	Ser	Asn	Ile	Thr	His	Ser	Ser	Ala	Val	
			645						650					655		
Ile	Ser	Trp	Thr	Ile	Leu	Asp	Gly	Tyr	Ser	Ile	Ser	Ser	Ile	Thr	Ile	
			660					665					670			
Arg	Tyr	Lys	Val	Gln	Gly	Lys	Asn	Glu	Asp	Gln	His	Val	Asp	Val	Lys	
		675					680					685				
Ile	Lys	Asn	Ala	Thr	Ile	Ile	Gln	Tyr	Gln	Leu	Lys	Gly	Leu	Glu	Pro	
	690					695					700					
Glu	Thr	Ala	Tyr	Gln	Val	Asp	Ile	Phe	Ala	Glu	Asn	Asn	Ile	Gly	Ser	
	705				710					715				720		
Ser	Asn	Pro	Ala	Phe	Ser	His	Glu	Leu	Val	Thr	Leu	Pro	Glu	Ser	Gln	
			725						730					735		
Ala	Pro	Ala	Asp	Leu	Gly	Gly	Gly	Lys	Met	Leu	Leu	Ile	Ala	Ile	Leu	
			740					745					750			
Gly	Ser	Ala	Gly	Met	Thr	Cys	Leu	Thr	Val	Leu	Leu	Ala	Phe	Leu	Ile	
		755					760					765				
Ile	Leu	Gln	Leu	Lys	Arg	Ala	Asn	Val	Gln	Arg	Arg	Met	Ala	Gln	Ala	
	770					775					780					
Phe	Gln	Asn	Val	Arg	Glu	Glu	Pro	Ala	Val	Gln	Phe	Asn	Ser	Gly	Thr	
	785				790					795					800	

Leu Ala Leu Asn Arg Lys Val Lys Asn Asn Pro Asp Pro Thr Ile Tyr
805 810 815
Pro Val Leu Asp Trp Asn Asp Ile Lys Phe Gln Asp Val Ile Gly Glu
820 825 830
Gly Asn Phe Gly Gln Val Leu Lys Ala Arg Ile Lys Lys Asp Gly Leu
835 840 845
Arg Met Asp Ala Ala Ile Lys Arg Met Lys Glu Tyr Ala Ser Lys Asp
850 855 860
Asp His Arg Asp Phe Ala Gly Glu Leu Glu Val Leu Cys Lys Leu Gly
865 870 875 880
His His Pro Asn Ile Ile Asn Leu Leu Gly Ala Cys Glu His Arg Gly
885 890 895
Tyr Leu Tyr Leu Ala Ile Glu Tyr Ala Pro His Gly Asn Leu Leu Asp
900 905 910
Phe Leu Arg Lys Ser Arg Val Leu Glu Thr Asp Pro Ala Phe Ala Ile
915 920 925
Ala Asn Ser Thr Ala Ser Thr Leu Ser Ser Gln Gln Leu Leu His Phe
930 935 940
Ala Ala Asp Val Ala Arg Gly Met Asp Tyr Leu Ser Gln Lys Gln Phe
945 950 955 960
Ile His Arg Asp Leu Ala Ala Arg Asn Ile Leu Val Gly Glu Asn Tyr
965 970 975
Val Ala Lys Ile Ala Asp Phe Gly Leu Ser Arg Gly Gln Glu Val Tyr
980 985 990
Val Lys Lys Thr Met Gly Arg Leu Pro Val Arg Trp Met Ala Ile Glu
995 1000 1005
Ser Leu Asn Tyr Ser Val Tyr Thr Thr Asn Ser Asp Val Trp Ser Tyr
1010 1015 1020
Gly Val Leu Leu Trp Glu Ile Val Ser Leu Gly Gly Thr Pro Tyr Cys
1025 1030 1035 1040
Gly Met Thr Cys Ala Glu Leu Tyr Glu Lys Leu Pro Gln Gly Tyr Arg
1045 1050 1055
Leu Glu Lys Pro Leu Asn Cys Asp Asp Glu Val Tyr Asp Leu Met Arg
1060 1065 1070
Gln Cys Trp Arg Glu Lys Pro Tyr Glu Arg Pro Ser Phe Ala Gln Ile
1075 1080 1085
Leu Val Ser Leu Asn Arg Met Leu Glu Glu Arg Lys Thr Tyr Val Asn
1090 1095 1100
Thr Thr Leu Tyr Glu Lys Phe Thr Tyr Ala Gly Ile Asp Cys Ser Ala
1105 1110 1115 1120
Glu Glu Ala Ala

<210> 113
<211> 308
<212> PRT
<213> Homo sapiens

<400> 113
Met Pro Gly Gln Glu Leu Arg Thr Val Asn Gly Ser Gln Met Leu Leu
1 5 10 15
Val Leu Leu Val Leu Ser Trp Leu Pro His Gly Gly Ala Leu Ser Leu
20 25 30
Ala Glu Ala Ser Arg Ala Ser Phe Pro Gly Pro Ser Glu Leu His Ser
35 40 45
Glu Asp Ser Arg Phe Arg Glu Leu Arg Lys Arg Tyr Glu Asp Leu Leu
50 55 60
Thr Arg Leu Arg Ala Asn Gln Ser Trp Glu Asp Ser Asn Thr Asp Leu
65 70 75 80
Val Pro Ala Pro Ala Val Arg Ile Leu Thr Pro Glu Val Arg Leu Gly
85 90 95

Ser Gly Gly His Leu His Leu Arg Ile Ser Arg Ala Ala Leu Pro Glu
 100 105 110
 Gly Leu Pro Glu Ala Ser Arg Leu His Arg Ala Leu Phe Arg Leu Ser
 115 120 125
 Pro Thr Ala Ser Arg Ser Trp Asp Val Thr Arg Pro Leu Arg Arg Gln
 130 135 140
 Leu Ser Leu Ala Arg Pro Gln Ala Pro Ala Leu His Leu Arg Leu Ser
 145 150 155 160
 Pro Pro Pro Ser Gln Ser Asp Gln Leu Leu Ala Glu Ser Ser Ser Ala
 165 170 175
 Arg Pro Gln Leu Glu Leu His Leu Arg Pro Gln Ala Ala Arg Gly Arg
 180 185 190
 Arg Arg Ala Arg Ala Arg Asn Gly Asp Asp Cys Pro Leu Gly Pro Gly
 195 200 205
 Arg Cys Cys Arg Leu His Thr Val Arg Ala Ser Leu Glu Asp Leu Gly
 210 215 220
 Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys
 225 230 235 240
 Ile Gly Ala Cys Pro Ser Gln Phe Arg Ala Ala Asn Met His Ala Gln
 245 250 255
 Ile Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Glu Pro Ala Pro
 260 265 270
 Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys Thr
 275 280 285
 Asp Thr Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu Ala Lys Asp
 290 295 300
 Cys His Cys Ile
 305

<210> 114
 <211> 1170
 <212> PRT
 <213> Homo sapiens

<400> 114
 Met Gly Leu Ala Trp Gly Leu Gly Val Leu Phe Leu Met His Val Cys
 1 5 10 15
 Gly Thr Asn Arg Ile Pro Glu Ser Gly Gly Asp Asn Ser Val Phe Asp
 20 25 30
 Ile Phe Glu Leu Thr Gly Ala Ala Arg Lys Gly Ser Gly Arg Arg Leu
 35 40 45
 Val Lys Gly Pro Asp Pro Ser Ser Pro Ala Phe Arg Ile Glu Asp Ala
 50 55 60
 Asn Leu Ile Pro Pro Val Pro Asp Asp Lys Phe Gln Asp Leu Val Asp
 65 70 75 80
 Ala Val Arg Ala Glu Lys Gly Phe Leu Leu Leu Ala Ser Leu Arg Gln
 85 90 95
 Met Lys Lys Thr Arg Gly Thr Leu Leu Ala Leu Glu Arg Lys Asp His
 100 105 110
 Ser Gly Gln Val Phe Ser Val Val Ser Asn Gly Lys Ala Gly Thr Leu
 115 120 125
 Asp Leu Ser Leu Thr Val Gln Gly Lys Gln His Val Val Ser Val Glu
 130 135 140
 Glu Ala Leu Leu Ala Thr Gly Gln Trp Lys Ser Ile Thr Leu Phe Val
 145 150 155 160
 Gln Glu Asp Arg Ala Gln Leu Tyr Ile Asp Cys Glu Lys Met Glu Asn
 165 170 175
 Ala Glu Leu Asp Val Pro Ile Gln Ser Val Phe Thr Arg Asp Leu Ala
 180 185 190
 Ser Ile Ala Arg Leu Arg Ile Ala Lys Gly Gly Val Asn Asp Asn Phe
 195 200 205

Gln	Gly	Val	Leu	Gln	Asn	Val	Arg	Phe	Val	Phe	Gly	Thr	Thr	Pro	Glu
210						215					220				
Asp	Ile	Leu	Arg	Asn	Lys	Gly	Cys	Ser	Ser	Ser	Thr	Ser	Val	Leu	Leu
225				230						235					240
Thr	Leu	Asp	Asn	Asn	Val	Val	Asn	Gly	Ser	Ser	Pro	Ala	Ile	Arg	Thr
			245						250					255	
Asn	Tyr	Ile	Gly	His	Lys	Thr	Lys	Asp	Leu	Gln	Ala	Ile	Cys	Gly	Ile
			260					265					270		
Ser	Cys	Asp	Glu	Leu	Ser	Ser	Met	Val	Leu	Glu	Leu	Arg	Gly	Leu	Arg
		275					280					285			
Thr	Ile	Val	Thr	Thr	Leu	Gln	Asp	Ser	Ile	Arg	Lys	Val	Thr	Glu	Glu
	290					295					300				
Asn	Lys	Glu	Leu	Ala	Asn	Glu	Leu	Arg	Arg	Pro	Pro	Leu	Cys	Tyr	His
305					310					315					320
Asn	Gly	Val	Gln	Tyr	Arg	Asn	Asn	Glu	Glu	Trp	Thr	Val	Asp	Ser	Cys
			325						330					335	
Thr	Glu	Cys	His	Cys	Gln	Asn	Ser	Val	Thr	Ile	Cys	Lys	Lys	Val	Ser
			340					345					350		
Cys	Pro	Ile	Met	Pro	Cys	Ser	Asn	Ala	Thr	Val	Pro	Asp	Gly	Gly	Cys
		355					360					365			
Cys	Pro	Arg	Cys	Trp	Pro	Ser	Asp	Ser	Ala	Asp	Asp	Gly	Trp	Ser	Pro
		370				375					380				
Trp	Ser	Glu	Trp	Thr	Ser	Cys	Ser	Thr	Ser	Cys	Gly	Asn	Gly	Ile	Gln
385					390					395					400
Gln	Arg	Gly	Arg	Ser	Cys	Asp	Ser	Leu	Asn	Asn	Arg	Cys	Glu	Gly	Ser
				405					410					415	
Ser	Val	Gln	Thr	Arg	Thr	Cys	His	Ile	Gln	Glu	Cys	Asp	Lys	Arg	Phe
			420					425					430		
Lys	Gln	Asp	Gly	Gly	Trp	Ser	His	Trp	Ser	Pro	Trp	Ser	Ser	Cys	Ser
		435					440					445			
Val	Thr	Cys	Gly	Asp	Gly	Val	Ile	Thr	Arg	Ile	Arg	Leu	Cys	Asn	Ser
	450					455					460				
Pro	Ser	Pro	Gln	Met	Asn	Gly	Lys	Pro	Cys	Glu	Gly	Glu	Ala	Arg	Glu
465					470					475					480
Thr	Lys	Ala	Cys	Lys	Lys	Asp	Ala	Cys	Pro	Ile	Asn	Gly	Gly	Trp	Gly
			485						490					495	
Pro	Trp	Ser	Pro	Trp	Asp	Ile	Cys	Ser	Val	Thr	Cys	Gly	Gly	Gly	Val
			500					505					510		
Gln	Lys	Arg	Ser	Arg	Leu	Cys	Asn	Asn	Pro	Ala	Pro	Gln	Phe	Gly	Gly
		515					520					525			
Lys	Asp	Cys	Val	Gly	Asp	Val	Thr	Glu	Asn	Gln	Ile	Cys	Asn	Lys	Gln
	530					535					540				
Asp	Cys	Pro	Ile	Asp	Gly	Cys	Leu	Ser	Asn	Pro	Cys	Phe	Ala	Gly	Val
545					550					555					560
Lys	Cys	Thr	Ser	Tyr	Pro	Asp	Gly	Ser	Trp	Lys	Cys	Gly	Ala	Cys	Pro
			565						570					575	
Pro	Gly	Tyr	Ser	Gly	Asn	Gly	Ile	Gln	Cys	Thr	Asp	Val	Asp	Glu	Cys
		580					585						590		
Lys	Glu	Val	Pro	Asp	Ala	Cys	Phe	Asn	His	Asn	Gly	Glu	His	Arg	Cys
		595					600					605			
Glu	Asn	Thr	Asp	Pro	Gly	Tyr	Asn	Cys	Leu	Pro	Cys	Pro	Pro	Arg	Phe
		610				615					620				
Thr	Gly	Ser	Gln	Pro	Phe	Gly	Gln	Gly	Val	Glu	His	Ala	Thr	Ala	Asn
625					630					635					640
Lys	Gln	Val	Cys	Lys	Pro	Arg	Asn	Pro	Cys	Thr	Asp	Gly	Thr	His	Asp
			645						650					655	
Cys	Asn	Lys	Asn	Ala	Lys	Cys	Asn	Tyr	Leu	Gly	His	Tyr	Ser	Asp	Pro
			660					665					670		
Met	Tyr	Arg	Cys	Glu	Cys	Lys	Pro	Gly	Tyr	Ala	Gly	Asn	Gly	Ile	Ile
		675					680					685			

Cys	Gly	Glu	Asp	Thr	Asp	Leu	Asp	Gly	Trp	Pro	Asn	Glu	Asn	Leu	Val
690						695					700				
Cys	Val	Ala	Asn	Ala	Thr	Tyr	His	Cys	Lys	Lys	Asp	Asn	Cys	Pro	Asn
705					710					715					720
Leu	Pro	Asn	Ser	Gly	Gln	Glu	Asp	Tyr	Asp	Lys	Asp	Gly	Ile	Gly	Asp
				725					730					735	
Ala	Cys	Asp	Asp	Asp	Asp	Asp	Asn	Asp	Lys	Ile	Pro	Asp	Asp	Arg	Asp
			740					745					750		
Asn	Cys	Pro	Phe	His	Tyr	Asn	Pro	Ala	Gln	Tyr	Asp	Tyr	Asp	Arg	Asp
		755					760					765			
Asp	Val	Gly	Asp	Arg	Cys	Asp	Asn	Cys	Pro	Tyr	Asn	His	Asn	Pro	Asp
	770					775					780				
Gln	Ala	Asp	Thr	Asp	Asn	Asn	Gly	Glu	Gly	Asp	Ala	Cys	Ala	Ala	Asp
785					790					795					800
Ile	Asp	Gly	Asp	Gly	Ile	Leu	Asn	Glu	Arg	Asp	Asn	Cys	Gln	Tyr	Val
				805					810					815	
Tyr	Asn	Val	Asp	Gln	Arg	Asp	Thr	Asp	Met	Asp	Gly	Val	Gly	Asp	Gln
			820					825					830		
Cys	Asp	Asn	Cys	Pro	Leu	Glu	His	Asn	Pro	Asp	Gln	Leu	Asp	Ser	Asp
		835					840					845			
Ser	Asp	Arg	Ile	Gly	Asp	Thr	Cys	Asp	Asn	Asn	Gln	Asp	Ile	Asp	Glu
	850					855					860				
Asp	Gly	His	Gln	Asn	Asn	Leu	Asp	Asn	Cys	Pro	Tyr	Val	Pro	Asn	Ala
865					870					875					880
Asn	Gln	Ala	Asp	His	Asp	Lys	Asp	Gly	Lys	Gly	Asp	Ala	Cys	Asp	His
				885					890					895	
Asp	Asp	Asp	Asn	Asp	Gly	Ile	Pro	Asp	Asp	Lys	Asp	Asn	Cys	Arg	Leu
			900					905					910		
Val	Pro	Asn	Pro	Asp	Gln	Lys	Asp	Ser	Asp	Gly	Asp	Gly	Arg	Gly	Asp
		915					920					925			
Ala	Cys	Lys	Asp	Asp	Phe	Asp	His	Asp	Ser	Val	Pro	Asp	Ile	Asp	Asp
	930				935						940				
Ile	Cys	Pro	Glu	Asn	Val	Asp	Ile	Ser	Glu	Thr	Asp	Phe	Arg	Arg	Phe
945					950					955					960
Gln	Met	Ile	Pro	Leu	Asp	Pro	Lys	Gly	Thr	Ser	Gln	Asn	Asp	Pro	Asn
				965					970					975	
Trp	Val	Val	Arg	His	Gln	Gly	Lys	Glu	Leu	Val	Gln	Thr	Val	Asn	Cys
			980					985					990		
Asp	Pro	Gly	Leu	Ala	Val	Gly	Tyr	Asp	Glu	Phe	Asn	Ala	Val	Asp	Phe
		995					1000					1005			
Ser	Gly	Thr	Phe	Phe	Ile	Asn	Thr	Glu	Arg	Asp	Asp	Asp	Tyr	Ala	Gly
	1010					1015						1020			
Phe	Val	Phe	Gly	Tyr	Gln	Ser	Ser	Ser	Arg	Phe	Tyr	Val	Val	Met	Trp
1025					1030						1035				1040
Lys	Gln	Val	Thr	Gln	Ser	Tyr	Trp	Asp	Thr	Asn	Pro	Thr	Arg	Ala	Gln
				1045					1050					1055	
Gly	Tyr	Ser	Gly	Leu	Ser	Val	Lys	Val	Val	Asn	Ser	Thr	Thr	Gly	Pro
			1060					1065					1070		
Gly	Glu	His	Leu	Arg	Asn	Ala	Leu	Trp	His	Thr	Gly	Asn	Thr	Pro	Gly
		1075					1080					1085			
Gln	Val	Arg	Thr	Leu	Trp	His	Asp	Pro	Arg	His	Ile	Gly	Trp	Lys	Asp
	1090				1095						1100				
Phe	Thr	Ala	Tyr	Arg	Trp	Arg	Leu	Ser	His	Arg	Pro	Lys	Thr	Gly	Phe
1105					1110					1115					1120
Ile	Arg	Val	Val	Met	Tyr	Glu	Gly	Lys	Lys	Ile	Met	Ala	Asp	Ser	Gly
				1125					1130					1135	
Pro	Ile	Tyr	Asp	Lys	Thr	Tyr	Ala	Gly	Gly	Arg	Leu	Gly	Leu	Phe	Val
			1140					1145					1150		

Phe Ser Gln Glu Met Val Phe Phe Ser Asp Leu Lys Tyr Glu Cys Arg
 1155 1160 1165
 Asp Pro
 1170

<210> 115
 <211> 373
 <212> PRT
 <213> Homo sapiens

<400> 115
 Met Ser Ser Thr Pro His Asp Pro Phe Tyr Ser Ser Pro Phe Gly Pro
 1 5 10 15
 Phe Tyr Arg Arg His Thr Pro Tyr Met Val Gln Pro Glu Tyr Arg Ile
 20 25 30
 Tyr Glu Met Asn Lys Arg Leu Gln Ser Arg Thr Glu Asp Ser Asp Asn
 35 40 45
 Leu Trp Trp Asp Ala Phe Ala Thr Glu Phe Phe Glu Asp Asp Ala Thr
 50 55 60
 Leu Thr Leu Ser Phe Cys Leu Glu Asp Gly Pro Lys Arg Tyr Thr Ile
 65 70 75 80
 Gly Arg Thr Leu Ile Pro Arg Tyr Phe Ser Thr Val Phe Glu Gly Gly
 85 90 95
 Val Thr Asp Leu Tyr Tyr Ile Leu Lys His Ser Lys Glu Ser Tyr His
 100 105 110
 Asn Ser Ser Ile Thr Val Asp Cys Asp Gln Cys Thr Met Val Thr Gln
 115 120 125
 His Gly Lys Pro Met Phe Thr Lys Val Cys Thr Glu Gly Arg Leu Ile
 130 135 140
 Leu Glu Phe Thr Phe Asp Asp Leu Met Arg Ile Lys Thr Trp His Phe
 145 150 155 160
 Thr Ile Arg Gln Tyr Arg Glu Leu Val Pro Arg Ser Ile Leu Ala Met
 165 170 175
 His Ala Gln Asp Pro Gln Val Leu Asp Gln Leu Ser Lys Asn Ile Thr
 180 185 190
 Arg Met Gly Leu Thr Asn Phe Thr Leu Asn Tyr Leu Arg Leu Cys Val
 195 200 205
 Ile Leu Glu Pro Met Gln Glu Leu Met Ser Arg His Lys Thr Tyr Asn
 210 215 220
 Leu Ser Pro Arg Asp Cys Leu Lys Thr Cys Leu Phe Gln Lys Trp Gln
 225 230 235 240
 Arg Met Val Ala Pro Pro Ala Glu Pro Thr Arg Gln Pro Thr Thr Lys
 245 250 255
 Arg Arg Lys Arg Lys Asn Ser Thr Ser Ser Thr Ser Asn Ser Ser Ala
 260 265 270
 Gly Asn Asn Ala Asn Ser Thr Gly Ser Lys Lys Lys Thr Thr Ala Ala
 275 280 285
 Asn Leu Ser Leu Ser Ser Gln Val Pro Asp Val Met Val Val Gly Glu
 290 295 300
 Pro Thr Leu Met Gly Gly Glu Phe Gly Asp Glu Asp Glu Arg Leu Ile
 305 310 315 320
 Thr Arg Leu Glu Asn Thr Gln Tyr Asp Ala Ala Asn Gly Met Asp Asp
 325 330 335
 Glu Glu Asp Phe Asn Asn Ser Pro Ala Leu Gly Asn Asn Ser Pro Trp
 340 345 350
 Asn Ser Lys Pro Pro Ala Thr Gln Glu Thr Lys Ser Glu Asn Pro Pro
 355 360 365
 Pro Gln Ala Ser Gln
 370

<210> 116
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 116
 Met Pro Ala Leu His Ile Glu Asp Leu Pro Glu Lys Glu Lys Leu Lys
 1 5 10 15
 Met Glu Val Glu Gln Leu Arg Lys Glu Val Lys Leu Gln Arg Gln Gln
 20 25 30
 Val Ser Lys Cys Ser Glu Glu Ile Lys Asn Tyr Ile Glu Glu Arg Ser
 35 40 45
 Gly Glu Asp Pro Leu Val Lys Gly Ile Pro Glu Asp Lys Asn Pro Phe
 50 55 60
 Lys Glu Lys Gly Ser Cys Val Ile Ser
 65 70

<210> 117
 <211> 667
 <212> PRT
 <213> Homo sapiens

<400> 117
 Met His His Gln Gln Arg Met Ala Ala Leu Gly Thr Asp Lys Glu Leu
 1 5 10 15
 Ser Asp Leu Leu Asp Phe Ser Ala Met Phe Ser Pro Pro Val Ser Ser
 20 25 30
 Gly Lys Asn Gly Pro Thr Ser Leu Ala Ser Gly His Phe Thr Gly Ser
 35 40 45
 Asn Val Glu Asp Arg Ser Ser Ser Gly Ser Trp Gly Asn Gly Gly His
 50 55 60
 Pro Ser Pro Ser Arg Asn Tyr Gly Asp Gly Thr Pro Tyr Asp His Met
 65 70 75 80
 Thr Ser Arg Asp Leu Gly Ser His Asp Asn Leu Ser Pro Pro Phe Val
 85 90 95
 Asn Ser Arg Ile Gln Ser Lys Thr Glu Arg Gly Ser Tyr Ser Ser Tyr
 100 105 110
 Gly Arg Glu Ser Asn Leu Gln Gly Cys His Gln Gln Ser Leu Leu Gly
 115 120 125
 Gly Asp Met Asp Met Gly Asn Pro Gly Thr Leu Ser Pro Thr Lys Pro
 130 135 140
 Gly Ser Gln Tyr Tyr Gln Tyr Ser Ser Asn Asn Pro Arg Arg Arg Pro
 145 150 155 160
 Leu His Ser Ser Ala Met Glu Val Gln Thr Lys Lys Val Arg Lys Val
 165 170 175
 Pro Pro Gly Leu Pro Ser Ser Val Tyr Ala Pro Ser Ala Ser Thr Ala
 180 185 190
 Asp Tyr Asn Arg Asp Ser Pro Gly Tyr Pro Ser Ser Lys Pro Ala Thr
 195 200 205
 Ser Thr Phe Pro Ser Ser Phe Phe Met Gln Asp Gly His His Ser Ser
 210 215 220
 Asp Pro Trp Ser Ser Ser Ser Gly Met Asn Gln Pro Gly Tyr Ala Gly
 225 230 235 240
 Met Leu Gly Asn Ser Ser His Ile Pro Gln Ser Ser Ser Tyr Cys Ser
 245 250 255
 Leu His Pro His Glu Arg Leu Ser Tyr Pro Ser His Ser Ser Ala Asp
 260 265 270
 Ile Asn Ser Ser Leu Pro Pro Met Ser Thr Phe His Arg Ser Gly Thr
 275 280 285
 Asn His Tyr Ser Thr Ser Ser Cys Thr Pro Pro Ala Asn Gly Thr Asp
 290 295 300

Ser Ile Met Ala Asn Arg Gly Ser Gly Ala Ala Gly Ser Ser Gln Thr
 305 310 315 320
 Gly Asp Ala Leu Gly Lys Ala Leu Ala Ser Ile Tyr Ser Pro Asp His
 325 330 335
 Thr Asn Asn Ser Phe Ser Ser Asn Pro Ser Thr Pro Val Gly Ser Pro
 340 345 350
 Pro Ser Leu Ser Ala Gly Thr Ala Val Trp Ser Arg Asn Gly Gly Gln
 355 360 365
 Ala Ser Ser Ser Pro Asn Tyr Glu Gly Pro Leu His Ser Leu Gln Ser
 370 375 380
 Arg Ile Glu Asp Arg Leu Glu Arg Leu Asp Asp Ala Ile His Val Leu
 385 390 395 400
 Arg Asn His Ala Val Gly Pro Ser Thr Ala Met Pro Gly Gly His Gly
 405 410 415
 Asp Met His Gly Ile Ile Gly Pro Ser His Asn Gly Ala Met Gly Gly
 420 425 430
 Leu Gly Ser Gly Tyr Gly Thr Gly Leu Leu Ser Ala Asn Arg His Ser
 435 440 445
 Leu Met Val Gly Thr His Arg Glu Asp Gly Val Ala Leu Arg Gly Ser
 450 455 460
 His Ser Leu Leu Pro Asn Gln Val Pro Val Pro Gln Leu Pro Val Gln
 465 470 475 480
 Ser Ala Thr Ser Pro Asp Leu Asn Pro Pro Gln Asp Pro Tyr Arg Gly
 485 490 495
 Met Pro Pro Gly Leu Gln Gly Gln Ser Val Ser Ser Gly Ser Ser Glu
 500 505 510
 Ile Lys Ser Asp Asp Glu Gly Asp Glu Asn Leu Gln Asp Thr Lys Ser
 515 520 525
 Ser Glu Asp Lys Lys Leu Asp Asp Asp Lys Lys Asp Ile Lys Ser Ile
 530 535 540
 Thr Ser Asn Asn Asp Asp Glu Asp Leu Thr Pro Glu Gln Lys Ala Glu
 545 550 555 560
 Arg Glu Lys Glu Arg Arg Met Ala Asn Asn Ala Arg Glu Arg Leu Arg
 565 570 575
 Val Arg Asp Ile Asn Glu Ala Phe Lys Glu Leu Gly Arg Met Val Gln
 580 585 590
 Leu His Leu Lys Ser Asp Lys Pro Gln Thr Lys Leu Ile Leu His
 595 600 605
 Gln Ala Val Ala Val Ile Leu Ser Leu Glu Gln Gln Val Arg Glu Arg
 610 615 620
 Asn Leu Asn Pro Lys Ala Ala Cys Leu Lys Arg Arg Glu Glu Glu Lys
 625 630 635 640
 Val Ser Ser Glu Pro Pro Pro Leu Ser Leu Ala Gly Pro His Pro Gly
 645 650 655
 Met Gly Asp Ala Ser Asn His Met Gly Gln Met
 660 665

<210> 118

<211> 749

<212> PRT

<213> Homo sapiens

<400> 118

Met Ser Phe Ile Asp Pro Tyr Gln His Ile Ile Val Glu His Gln Tyr
 1 5 10 15
 Ser His Lys Phe Thr Val Val Val Leu Arg Ala Thr Lys Val Thr Lys
 20 25 30
 Gly Ala Phe Gly Asp Met Leu Asp Thr Pro Asp Pro Tyr Val Glu Leu
 35 40 45
 Phe Ile Ser Thr Thr Pro Asp Ser Arg Lys Arg Thr Arg His Phe Asn
 50 55 60

```

Asn Asp Ile Asn Pro Val Trp Asn Glu Thr Phe Glu Phe Ile Leu Asp
65      70      75
Pro Asn Gln Glu Asn Val Leu Glu Ile Thr Leu Met Asp Ala Asn Tyr
      85      90      95
Val Met Asp Glu Thr Leu Gly Thr Ala Thr Phe Thr Val Ser Ser Met
      100      105      110
Lys Val Gly Glu Lys Lys Glu Val Pro Phe Ile Phe Asn Gln Val Thr
      115      120      125
Glu Met Val Leu Glu Met Ser Leu Glu Val Cys Ser Cys Pro Asp Leu
      130      135      140
Arg Phe Ser Met Ala Leu Cys Asp Gln Glu Lys Thr Phe Arg Gln Gln
145      150      155      160
Arg Lys Glu His Ile Arg Glu Ser Met Lys Lys Leu Leu Gly Pro Lys
      165      170      175
Asn Ser Glu Gly Leu His Ser Ala Arg Asp Val Pro Val Val Ala Ile
      180      185      190
Leu Gly Ser Gly Gly Gly Phe Arg Ala Met Val Gly Phe Ser Gly Val
      195      200      205
Met Lys Ala Leu Tyr Glu Ser Gly Ile Leu Asp Cys Ala Thr Tyr Val
210      215      220
Ala Gly Leu Ser Gly Ser Thr Trp Tyr Met Ser Thr Leu Tyr Ser His
225      230      235      240
Pro Asp Phe Pro Glu Lys Gly Pro Glu Glu Ile Asn Glu Glu Leu Met
      245      250      255
Lys Asn Val Ser His Asn Pro Leu Leu Leu Lys Thr Pro Gln Lys Val
      260      265      270
Lys Arg Tyr Val Glu Ser Leu Trp Lys Lys Ser Ser Gly Gln Pro
      275      280      285
Val Thr Phe Thr Asp Ile Phe Gly Met Leu Ile Gly Glu Thr Leu Ile
      290      295      300
His Asn Arg Met Asn Thr Thr Leu Ser Ser Leu Lys Glu Lys Val Asn
305      310      315      320
Thr Ala Gln Cys Pro Leu Pro Leu Phe Thr Cys Leu His Val Lys Pro
      325      330      335
Asp Val Ser Glu Leu Met Phe Ala Asp Trp Val Glu Phe Ser Pro Tyr
      340      345      350
Glu Ile Gly Met Ala Lys Tyr Gly Thr Phe Met Ala Pro Asp Leu Phe
      355      360      365
Gly Ser Lys Phe Phe Met Gly Thr Val Val Lys Lys Tyr Glu Glu Asn
      370      375      380
Pro Leu His Phe Leu Met Gly Val Trp Gly Ser Ala Phe Ser Ile Leu
385      390      395      400
Phe Asn Arg Val Leu Gly Val Ser Gly Ser Gln Ser Arg Gly Ser Thr
      405      410      415
Met Glu Glu Glu Leu Glu Asn Ile Thr Thr Lys His Ile Val Ser Asn
      420      425      430
Asp Ser Ser Asp Ser Asp Asp Glu Ser His Glu Pro Lys Gly Thr Glu
      435      440      445
Asn Glu Asp Ala Gly Ser Asp Tyr Gln Ser Asp Asn Gln Ala Ser Trp
      450      455      460
Ile His Arg Met Ile Met Ala Leu Val Ser Asp Ser Ala Leu Phe Asn
465      470      475      480
Thr Arg Glu Gly Arg Ala Gly Lys Val His Asn Phe Met Leu Gly Leu
      485      490      495
Asn Leu Asn Thr Ser Tyr Pro Leu Ser Pro Leu Ser Asp Phe Ala Thr
      500      505      510
Gln Asp Ser Phe Asp Asp Asp Glu Leu Asp Ala Ala Val Ala Asp Pro
      515      520      525
Asp Glu Phe Glu Arg Ile Tyr Glu Pro Leu Asp Val Lys Ser Lys Lys
530      535      540

```

Ile His Val Val Asp Ser Gly Leu Thr Phe Asn Leu Pro Tyr Pro Leu
 545 550 555 560
 Ile Leu Arg Pro Gln Arg Gly Val Asp Leu Ile Ile Ser Phe Asp Phe
 565 570 575
 Ser Ala Arg Pro Ser Asp Ser Ser Pro Phe Lys Glu Leu Leu Leu
 580 585 590
 Ala Glu Lys Trp Ala Lys Met Asn Lys Leu Pro Phe Pro Lys Ile Asp
 595 600 605
 Pro Tyr Val Phe Asp Arg Glu Gly Leu Lys Glu Cys Tyr Val Phe Lys
 610 615 620
 Pro Lys Asn Pro Asp Met Glu Lys Asp Cys Pro Thr Ile Ile His Phe
 625 630 635 640
 Val Leu Ala Asn Ile Asn Phe Arg Lys Tyr Lys Ala Pro Gly Val Pro
 645 650 655
 Arg Glu Thr Glu Glu Glu Lys Glu Ile Ala Asp Phe Asp Ile Phe Asp
 660 665 670
 Asp Pro Glu Ser Pro Phe Ser Thr Phe Asn Phe Gln Tyr Pro Asn Gln
 675 680 685
 Ala Phe Lys Arg Leu His Asp Leu Met His Phe Asn Thr Leu Asn Asn
 690 695 700
 Ile Asp Val Ile Lys Glu Ala Met Val Glu Ser Ile Glu Tyr Arg Arg
 705 710 715 720
 Gln Asn Pro Ser Arg Cys Ser Val Ser Leu Ser Asn Val Glu Ala Arg
 725 730 735
 Arg Phe Phe Asn Lys Glu Phe Leu Ser Lys Pro Lys Ala
 740 745

<210> 119
 <211> 235
 <212> PRT
 <213> Homo sapiens

<400> 119
 Met Asp Pro Ala Arg Pro Leu Gly Leu Ser Ile Leu Leu Leu Phe Leu
 1 5 10 15
 Thr Glu Ala Ala Leu Gly Asp Ala Ala Gln Glu Pro Thr Gly Asn Asn
 20 25 30
 Ala Glu Ile Cys Leu Leu Pro Leu Asp Tyr Gly Pro Cys Arg Ala Leu
 35 40 45
 Leu Leu Arg Tyr Tyr Tyr Asp Arg Tyr Thr Gln Ser Cys Arg Gln Phe
 50 55 60
 Leu Tyr Gly Gly Cys Glu Gly Asn Ala Asn Phe Tyr Thr Trp Glu
 65 70 75 80
 Ala Cys Asp Asp Ala Cys Trp Arg Ile Glu Lys Val Pro Lys Val Cys
 85 90 95
 Arg Leu Gln Val Ser Val Asp Asp Gln Cys Glu Gly Ser Thr Glu Lys
 100 105 110
 Tyr Phe Phe Asn Leu Ser Ser Met Thr Cys Glu Lys Phe Phe Ser Gly
 115 120 125
 Gly Cys His Arg Asn Arg Ile Glu Asn Arg Phe Pro Asp Glu Ala Thr
 130 135 140
 Cys Met Gly Phe Cys Ala Pro Lys Lys Ile Pro Ser Phe Cys Tyr Ser
 145 150 155 160
 Pro Lys Asp Glu Gly Leu Cys Ser Ala Asn Val Thr Arg Tyr Tyr Phe
 165 170 175
 Asn Pro Arg Tyr Arg Thr Cys Asp Ala Phe Thr Tyr Thr Gly Cys Gly
 180 185 190
 Gly Asn Asp Asn Asn Phe Val Ser Arg Glu Asp Cys Lys Arg Ala Cys
 195 200 205
 Ala Lys Ala Leu Lys Lys Lys Lys Lys Met Pro Lys Leu Arg Phe Ala
 210 215 220

Ser Arg Ile Arg Lys Ile Arg Lys Lys Gln Phe
 225 230 235

<210> 120
 <211> 2058
 <212> PRT
 <213> Homo sapiens

<400> 120
 Met Asp Asn Phe Thr Glu Gly Thr Arg Val Trp Leu Arg Glu Asn
 1 5 10 15
 Gly Gln His Phe Pro Ser Thr Val Asn Ser Cys Ala Glu Gly Ile Val
 20 25 30
 Val Phe Arg Thr Asp Tyr Gly Gln Val Phe Thr Tyr Lys Gln Ser Thr
 35 40 45
 Ile Thr His Gln Lys Val Thr Ala Met His Pro Thr Asn Glu Glu Gly
 50 55 60
 Val Asp Asp Met Ala Ser Leu Thr Glu Leu His Gly Gly Ser Ile Met
 65 70 75 80
 Tyr Asn Leu Phe Gln Arg Tyr Lys Arg Asn Gln Ile Tyr Thr Tyr Ile
 85 90 95
 Gly Ser Ile Leu Ala Ser Val Asn Pro Tyr Gln Pro Ile Ala Gly Leu
 100 105 110
 Tyr Glu Pro Ala Thr Met Glu Gln Tyr Ser Arg Arg His Leu Gly Glu
 115 120 125
 Leu Pro Pro His Ile Phe Ala Ile Ala Asn Glu Cys Tyr Arg Cys Leu
 130 135 140
 Trp Lys Arg Tyr Asp Asn Gln Cys Ile Leu Ile Ser Gly Glu Ser Gly
 145 150 155 160
 Ala Gly Lys Thr Glu Ser Thr Lys Leu Ile Leu Lys Phe Leu Ser Val
 165 170 175
 Ile Ser Gln Gln Ser Leu Glu Leu Ser Leu Lys Glu Lys Thr Ser Cys
 180 185 190
 Val Glu Arg Ala Ile Leu Glu Ser Ser Pro Ile Met Glu Ala Phe Gly
 195 200 205
 Asn Ala Lys Thr Val Tyr Asn Asn Asn Ser Ser Arg Phe Gly Lys Phe
 210 215 220
 Val Gln Leu Asn Ile Cys Gln Lys Gly Asn Ile Gln Gly Gly Arg Ile
 225 230 235 240
 Val Asp Tyr Leu Leu Glu Lys Asn Arg Val Val Arg Gln Asn Pro Gly
 245 250 255
 Glu Arg Asn Tyr His Ile Phe Tyr Ala Leu Leu Ala Gly Leu Glu His
 260 265 270
 Glu Glu Arg Glu Glu Phe Tyr Leu Ser Thr Pro Glu Asn Tyr His Tyr
 275 280 285
 Leu Asn Gln Ser Gly Cys Val Glu Asp Lys Thr Ile Ser Asp Gln Glu
 290 295 300
 Ser Phe Arg Glu Val Ile Thr Ala Met Asp Val Met Gln Phe Ser Lys
 305 310 315 320
 Glu Glu Val Arg Glu Val Ser Arg Leu Leu Ala Gly Ile Leu His Leu
 325 330 335
 Gly Asn Ile Glu Phe Ile Thr Ala Gly Gly Ala Gln Val Ser Phe Lys
 340 345 350
 Thr Ala Leu Gly Arg Ser Ala Glu Leu Leu Gly Leu Asp Pro Thr Gln
 355 360 365
 Leu Thr Asp Ala Leu Thr Gln Arg Ser Met Phe Leu Arg Gly Glu Glu
 370 375 380
 Ile Leu Thr Pro Leu Asn Val Gln Gln Ala Val Asp Ser Arg Asp Ser
 385 390 395 400
 Leu Ala Met Ala Leu Tyr Ala Cys Cys Phe Glu Trp Val Ile Lys Lys
 405 410 415

Ile	Asn	Ser	Arg	Ile	Lys	Gly	Asn	Glu	Asp	Phe	Lys	Ser	Ile	Gly	Ile
			420					425					430		
Leu	Asp	Ile	Phe	Gly	Phe	Glu	Asn	Phe	Glu	Val	Asn	His	Phe	Glu	Gln
		435					440				445				
Phe	Asn	Ile	Asn	Tyr	Ala	Asn	Glu	Lys	Leu	Gln	Glu	Tyr	Phe	Asn	Lys
	450					455				460					
His	Ile	Phe	Ser	Leu	Glu	Gln	Leu	Glu	Tyr	Ser	Arg	Glu	Gly	Leu	Val
465				470					475					480	
Trp	Glu	Asp	Ile	Asp	Trp	Ile	Asp	Asn	Gly	Glu	Cys	Leu	Asp	Leu	Ile
			485					490					495		
Glu	Lys	Lys	Leu	Gly	Leu	Leu	Ala	Leu	Ile	Asn	Glu	Glu	Ser	His	Phe
			500					505					510		
Pro	Gln	Ala	Thr	Asp	Ser	Thr	Leu	Leu	Glu	Lys	Leu	His	Ser	Gln	His
		515					520					525			
Ala	Asn	Asn	His	Phe	Tyr	Val	Lys	Pro	Arg	Val	Ala	Val	Asn	Asn	Phe
	530					535					540				
Gly	Val	Lys	His	Tyr	Ala	Gly	Glu	Val	Gln	Tyr	Asp	Val	Arg	Gly	Ile
545				550					555					560	
Leu	Glu	Lys	Asn	Arg	Asp	Thr	Phe	Arg	Asp	Asp	Leu	Leu	Asn	Leu	Leu
			565					570					575		
Arg	Glu	Ser	Arg	Phe	Asp	Phe	Ile	Tyr	Asp	Leu	Phe	Glu	His	Val	Ser
		580					585						590		
Ser	Arg	Asn	Asn	Gln	Asp	Thr	Leu	Lys	Cys	Gly	Ser	Lys	His	Arg	Arg
	595					600						605			
Pro	Thr	Val	Ser	Ser	Gln	Phe	Lys	Asp	Ser	Leu	His	Ser	Leu	Met	Ala
	610				615							620			
Thr	Leu	Ser	Ser	Ser	Asn	Pro	Phe	Phe	Val	Arg	Cys	Ile	Lys	Pro	Asn
625				630					635					640	
Met	Gln	Lys	Met	Pro	Asp	Gln	Phe	Asp	Gln	Ala	Val	Val	Leu	Asn	Gln
			645					650					655		
Leu	Arg	Tyr	Ser	Gly	Met	Leu	Glu	Thr	Val	Arg	Ile	Arg	Lys	Ala	Gly
	660						665						670		
Tyr	Ala	Val	Arg	Arg	Pro	Phe	Gln	Asp	Phe	Tyr	Lys	Arg	Tyr	Lys	Val
	675					680					685				
Leu	Met	Arg	Asn	Leu	Ala	Leu	Pro	Glu	Asp	Val	Arg	Gly	Lys	Cys	Thr
	690					695					700				
Ser	Leu	Leu	Gln	Leu	Tyr	Asp	Ala	Ser	Asn	Ser	Glu	Trp	Gln	Leu	Gly
705				710					715					720	
Lys	Thr	Lys	Val	Phe	Leu	Arg	Glu	Ser	Leu	Glu	Gln	Lys	Leu	Glu	Lys
			725					730					735		
Arg	Arg	Glu	Glu	Glu	Val	Ser	His	Ala	Ala	Met	Val	Ile	Arg	Ala	His
		740					745					750			
Val	Leu	Gly	Phe	Leu	Ala	Arg	Lys	Gln	Tyr	Arg	Lys	Val	Leu	Tyr	Cys
	755					760					765				
Val	Val	Ile	Ile	Gln	Lys	Asn	Tyr	Arg	Ala	Phe	Leu	Leu	Arg	Arg	Arg
	770					775					780				
Phe	Leu	His	Leu	Lys	Lys	Ala	Ala	Ile	Val	Phe	Gln	Lys	Gln	Leu	Arg
785				790					795					800	
Gly	Gln	Ile	Ala	Arg	Arg	Val	Tyr	Arg	Gln	Leu	Leu	Ala	Glu	Lys	Arg
			805					810					815		
Glu	Gln	Glu	Glu	Lys	Lys	Lys	Gln	Glu	Glu	Glu	Lys	Lys	Lys	Lys	Arg
		820					825					830			
Glu	Glu	Glu	Glu	Arg	Glu	Arg	Glu	Arg	Glu	Arg	Arg	Glu	Ala	Glu	Leu
	835						840					845			
Arg	Ala	Gln	Gln	Glu	Glu	Glu	Thr	Arg	Lys	Gln	Gln	Glu	Leu	Glu	Ala
	850				855					860					
Leu	Gln	Lys	Ser	Gln	Lys	Glu	Ala	Glu	Leu	Thr	Arg	Glu	Leu	Glu	Lys
865				870					875					880	
Gln	Lys	Glu	Asn	Lys	Gln	Val	Glu	Glu	Ile	Leu	Arg	Leu	Glu	Lys	Glu
			885					890					895		

Ile	Glu	Asp	Leu	Gln	Arg	Met	Lys	Glu	Gln	Gln	Glu	Leu	Ser	Leu	Thr	
			900					905					910			
Glu	Ala	Ser	Leu	Gln	Lys	Leu	Gln	Glu	Arg	Arg	Asp	Gln	Glu	Leu	Arg	
		915					920					925				
Arg	Leu	Glu	Glu	Glu	Ala	Cys	Arg	Ala	Ala	Gln	Glu	Phe	Leu	Glu	Ser	
		930				935						940				
Leu	Asn	Phe	Asp	Glu	Ile	Asp	Glu	Cys	Val	Arg	Asn	Ile	Glu	Arg	Ser	
		945			950					955					960	
Leu	Ser	Val	Gly	Ser	Glu	Phe	Ser	Ser	Glu	Leu	Ala	Glu	Ser	Ala	Cys	
			965						970					975		
Glu	Glu	Lys	Pro	Asn	Phe	Asn	Phe	Ser	Gln	Pro	Tyr	Pro	Glu	Glu	Glu	
			980					985					990			
Val	Asp	Glu	Gly	Phe	Glu	Ala	Asp	Asp	Asp	Ala	Phe	Lys	Asp	Ser	Pro	
		995					1000					1005				
Asn	Pro	Ser	Glu	His	Gly	His	Ser	Asp	Gln	Arg	Thr	Ser	Gly	Ile	Arg	
		1010				1015					1020					
Thr	Ser	Asp	Asp	Ser	Ser	Glu	Glu	Asp	Pro	Tyr	Met	Asn	Asp	Thr	Val	
		1025			1030					1035					1040	
Val	Pro	Thr	Ser	Pro	Ser	Ala	Asp	Ser	Thr	Val	Leu	Leu	Ala	Pro	Ser	
				1045					1050					1055		
Val	Gln	Asp	Ser	Gly	Ser	Leu	His	Asn	Ser	Ser	Ser	Gly	Glu	Ser	Thr	
			1060					1065					1070			
Tyr	Cys	Met	Pro	Gln	Asn	Ala	Gly	Asp	Leu	Pro	Ser	Pro	Asp	Gly	Asp	
		1075				1080						1085				
Tyr	Asp	Tyr	Asp	Gln	Asp	Asp	Tyr	Glu	Asp	Gly	Ala	Ile	Thr	Ser	Gly	
		1090				1095					1100					
Ser	Ser	Val	Thr	Phe	Ser	Asn	Ser	Tyr	Gly	Ser	Gln	Trp	Ser	Pro	Asp	
				1110						1115					1120	
Tyr	Arg	Cys	Ser	Val	Gly	Thr	Tyr	Asn	Ser	Ser	Gly	Ala	Tyr	Arg	Phe	
				1125					1130					1135		
Ser	Ser	Glu	Gly	Ala	Gln	Ser	Ser	Phe	Glu	Asp	Ser	Glu	Glu	Asp	Phe	
			1140					1145					1150			
Asp	Ser	Arg	Phe	Asp	Thr	Asp	Asp	Glu	Leu	Ser	Tyr	Arg	Arg	Asp	Ser	
		1155					1160					1165				
Val	Tyr	Ser	Cys	Val	Thr	Leu	Pro	Tyr	Phe	His	Ser	Phe	Leu	Tyr	Met	
		1170				1175					1180					
Lys	Gly	Gly	Leu	Met	Asn	Ser	Trp	Lys	Arg	Arg	Trp	Cys	Val	Leu	Lys	
		1185			1190					1195					1200	
Asp	Glu	Thr	Phe	Leu	Trp	Phe	Arg	Ser	Lys	Gln	Glu	Ala	Leu	Lys	Gln	
			1205						1210					1215		
Gly	Trp	Leu	His	Lys	Lys	Gly	Gly	Gly	Ser	Ser	Thr	Leu	Ser	Arg	Arg	
			1220					1225					1230			
Asn	Trp	Lys	Lys	Arg	Trp	Phe	Val	Leu	Arg	Gln	Ser	Lys	Leu	Met	Tyr	
		1235				1240						1245				
Phe	Glu	Asn	Asp	Ser	Glu	Glu	Lys	Leu	Lys	Gly	Thr	Val	Glu	Val	Arg	
		1250				1255					1260					
Thr	Ala	Lys	Glu	Ile	Ile	Asp	Asn	Thr	Thr	Lys	Glu	Asn	Gly	Ile	Asp	
		1265			1270					1275				1280		
Ile	Ile	Met	Ala	Asp	Arg	Thr	Phe	His	Leu	Ile	Ala	Glu	Ser	Pro	Glu	
			1285						1290					1295		
Asp	Ala	Ser	Gln	Trp	Phe	Ser	Val	Leu	Ser	Gln	Val	His	Ala	Ser	Thr	
		1300						1305				1310				
Asp	Gln	Glu	Ile	Gln	Glu	Met	His	Asp	Glu	Gln	Ala	Asn	Pro	Gln	Asn	
		1315				1320						1325				
Ala	Val	Gly	Thr	Leu	Asp	Val	Gly	Leu	Ile	Asp	Ser	Val	Cys	Ala	Ser	
		1330				1335					1340					
Asp	Ser	Pro	Asp	Arg	Pro	Asn	Ser	Phe	Val	Ile	Ile	Thr	Ala	Asn	Arg	
		1345			1350					1355				1360		
Val	Leu	His	Cys	Asn	Ala	Asp	Thr	Pro	Glu	Glu	Met	His	His	Trp	Ile	
			1365					1370						1375		

Leu Gln Arg Leu Lys Ala Arg Ile Ser Gln Ser Thr Lys Thr Phe Thr
 1860 1865 1870
 Pro Cys Glu Arg Leu Glu Lys Arg Arg Thr Ser Phe Leu Glu Gly Thr
 1875 1880 1885
 Leu Arg Arg Ser Phe Arg Thr Gly Ser Val Val Arg Gln Lys Val Glu
 1890 1895 1900
 Glu Glu Gln Met Leu Asp Met Trp Ile Lys Glu Glu Val Ser Ser Ala
 1905 1910 1915 1920
 Arg Ala Ser Ile Ile Asp Lys Trp Arg Lys Phe Gln Gly Met Asn Gln
 1925 1930 1935
 Glu Gln Ala Met Ala Lys Tyr Met Ala Leu Ile Lys Glu Trp Pro Gly
 1940 1945 1950
 Tyr Gly Ser Thr Leu Phe Asp Val Glu Cys Lys Glu Gly Gly Phe Pro
 1955 1960 1965
 Gln Glu Leu Trp Leu Gly Val Ser Ala Asp Ala Val Ser Val Tyr Lys
 1970 1975 1980
 Arg Gly Glu Gly Arg Pro Leu Glu Val Phe Gln Tyr Glu His Ile Leu
 1985 1990 1995 2000
 Ser Phe Gly Ala Pro Leu Ala Asn Thr Tyr Lys Ile Val Val Asp Glu
 2005 2010 2015
 Arg Glu Leu Leu Phe Glu Thr Ser Glu Val Val Asp Val Ala Lys Leu
 2020 2025 2030
 Met Lys Ala Tyr Ile Ser Met Ile Val Lys Lys Arg Tyr Ser Thr Thr
 2035 2040 2045
 Arg Ser Ala Ser Ser Gln Gly Ser Ser Arg
 2050 2055

<210> 121
 <211> 461
 <212> PRT
 <213> Homo sapiens

<400> 121
 Met Glu Lys Lys Cys Thr Leu Tyr Phe Leu Val Leu Leu Pro Phe Phe
 1 5 10 15
 Met Ile Leu Val Thr Ala Glu Leu Glu Glu Ser Pro Glu Asp Ser Ile
 20 25 30
 Gln Leu Gly Val Thr Arg Asn Lys Ile Met Thr Ala Gln Tyr Glu Cys
 35 40 45
 Tyr Gln Lys Ile Met Gln Asp Pro Ile Gln Gln Ala Glu Gly Val Tyr
 50 55 60
 Cys Asn Arg Thr Trp Asp Gly Trp Leu Cys Trp Asn Asp Val Ala Ala
 65 70 75 80
 Gly Thr Glu Ser Met Gln Leu Cys Pro Asp Tyr Phe Gln Asp Phe Asp
 85 90 95
 Pro Ser Glu Lys Val Thr Lys Ile Cys Asp Gln Asp Gly Asn Trp Phe
 100 105 110
 Arg His Pro Ala Ser Asn Arg Thr Trp Thr Asn Tyr Thr Gln Cys Asn
 115 120 125
 Val Asn Thr His Glu Lys Val Lys Thr Ala Leu Asn Leu Phe Tyr Leu
 130 135 140
 Thr Ile Ile Gly His Gly Leu Ser Ile Ala Ser Leu Leu Ile Ser Leu
 145 150 155 160
 Gly Ile Phe Phe Tyr Phe Lys Ser Leu Ser Cys Gln Arg Ile Thr Leu
 165 170 175
 His Lys Asn Leu Phe Phe Ser Phe Val Cys Asn Ser Val Val Thr Ile
 180 185 190
 Ile His Leu Thr Ala Val Ala Asn Asn Gln Ala Leu Val Ala Thr Asn
 195 200 205
 Pro Val Ser Cys Lys Val Ser Gln Phe Ile His Leu Tyr Leu Met Gly
 210 215 220

Cys	Asn	Tyr	Phe	Trp	Met	Leu	Cys	Glu	Gly	Ile	Tyr	Leu	His	Thr	Leu
225					230					235					240
Ile	Val	Val	Ala	Val	Phe	Ala	Glu	Lys	Gln	His	Leu	Met	Trp	Tyr	Tyr
				245					250						255
Phe	Leu	Gly	Trp	Gly	Phe	Pro	Leu	Ile	Pro	Ala	Cys	Ile	His	Ala	Ile
			260					265					270		
Ala	Arg	Ser	Leu	Tyr	Tyr	Asn	Asp	Asn	Cys	Trp	Ile	Ser	Ser	Asp	Thr
		275					280					285			
His	Leu	Leu	Tyr	Ile	Ile	His	Gly	Pro	Ile	Cys	Ala	Ala	Leu	Leu	Val
	290				295					300					
Asn	Leu	Phe	Phe	Leu	Leu	Asn	Ile	Val	Arg	Val	Leu	Ile	Thr	Lys	Leu
305				310						315					320
Lys	Val	Thr	His	Gln	Ala	Glu	Ser	Asn	Leu	Tyr	Met	Lys	Ala	Val	Arg
			325						330					335	
Ala	Thr	Leu	Ile	Leu	Val	Pro	Leu	Leu	Gly	Ile	Glu	Phe	Val	Leu	Ile
		340						345					350		
Pro	Trp	Arg	Pro	Glu	Gly	Lys	Ile	Ala	Glu	Glu	Val	Tyr	Asp	Tyr	Ile
		355				360					365				
Met	His	Ile	Leu	Met	His	Phe	Gln	Gly	Leu	Leu	Val	Ser	Thr	Ile	Phe
	370				375					380					
Cys	Phe	Phe	Asn	Gly	Glu	Val	Gln	Ala	Ile	Leu	Arg	Arg	Asn	Trp	Asn
385				390					395						400
Gln	Tyr	Lys	Ile	Gln	Phe	Gly	Asn	Ser	Phe	Ser	Asn	Ser	Glu	Ala	Leu
			405						410					415	
Arg	Ser	Ala	Ser	Tyr	Thr	Val	Ser	Thr	Ile	Ser	Asp	Gly	Pro	Gly	Tyr
		420						425				430			
Ser	His	Asp	Cys	Pro	Ser	Glu	His	Leu	Asn	Gly	Lys	Ser	Ile	His	Asp
		435				440					445				
Ile	Glu	Asn	Val	Leu	Leu	Lys	Pro	Glu	Asn	Leu	Tyr	Asn			
	450				455						460				

<210> 122

<211> 610

<212> PRT

<213> Homo sapiens

<400> 122

Met	Ile	Ala	Ser	Gln	Phe	Leu	Ser	Ala	Leu	Thr	Leu	Val	Leu	Leu	Ile
1				5					10					15	
Lys	Glu	Ser	Gly	Ala	Trp	Ser	Tyr	Asn	Thr	Ser	Thr	Glu	Ala	Met	Thr
			20					25					30		
Tyr	Asp	Glu	Ala	Ser	Ala	Tyr	Cys	Gln	Gln	Arg	Tyr	Thr	His	Leu	Val
		35					40					45			
Ala	Ile	Gln	Asn	Lys	Glu	Glu	Ile	Glu	Tyr	Leu	Asn	Ser	Ile	Leu	Ser
		50				55					60				
Tyr	Ser	Pro	Ser	Tyr	Tyr	Trp	Ile	Gly	Ile	Arg	Lys	Val	Asn	Asn	Val
65					70				75					80	
Trp	Val	Trp	Val	Gly	Thr	Gln	Lys	Pro	Leu	Thr	Glu	Glu	Ala	Lys	Asn
				85					90					95	
Trp	Ala	Pro	Gly	Glu	Pro	Asn	Asn	Arg	Gln	Lys	Asp	Glu	Asp	Cys	Val
			100					105					110		
Glu	Ile	Tyr	Ile	Lys	Arg	Glu	Lys	Asp	Val	Gly	Met	Trp	Asn	Asp	Glu
		115					120					125			
Arg	Cys	Ser	Lys	Lys	Lys	Leu	Ala	Leu	Cys	Tyr	Thr	Ala	Ala	Cys	Thr
		130			135						140				
Asn	Thr	Ser	Cys	Ser	Gly	His	Gly	Glu	Cys	Val	Glu	Thr	Ile	Asn	Asn
145					150					155					160
Tyr	Thr	Cys	Lys	Cys	Asp	Pro	Gly	Phe	Ser	Gly	Leu	Lys	Cys	Glu	Gln
			165						170					175	
Ile	Val	Asn	Cys	Thr	Ala	Leu	Glu	Ser	Pro	Glu	His	Gly	Ser	Leu	Val
			180					185					190		

Cys Ser His Pro Leu Gly Asn Phe Ser Tyr Asn Ser Ser Cys Ser Ile
 195 200 205
 Ser Cys Asp Arg Gly Tyr Leu Pro Ser Ser Met Glu Thr Met Gln Cys
 210 215 220
 Met Ser Ser Gly Glu Trp Ser Ala Pro Ile Pro Ala Cys Asn Val Val
 225 230 235 240
 Glu Cys Asp Ala Val Thr Asn Pro Ala Asn Gly Phe Val Glu Cys Phe
 245 250 255
 Gln Asn Pro Gly Ser Phe Pro Trp Asn Thr Thr Cys Thr Phe Asp Cys
 260 265 270
 Glu Glu Gly Phe Glu Leu Met Gly Ala Gln Ser Leu Gln Cys Thr Ser
 275 280 285
 Ser Gly Asn Trp Asp Asn Glu Lys Pro Thr Cys Lys Ala Val Thr Cys
 290 295 300
 Arg Ala Val Arg Gln Pro Gln Asn Gly Ser Val Arg Cys Ser His Ser
 305 310 315 320
 Pro Ala Gly Glu Phe Thr Phe Lys Ser Ser Cys Asn Phe Thr Cys Glu
 325 330 335
 Glu Gly Phe Met Leu Gln Gly Pro Ala Gln Val Glu Cys Thr Thr Gln
 340 345 350
 Gly Gln Trp Thr Gln Gln Ile Pro Val Cys Glu Ala Phe Gln Cys Thr
 355 360 365
 Ala Leu Ser Asn Pro Glu Arg Gly Tyr Met Asn Cys Leu Pro Ser Ala
 370 375 380
 Ser Gly Ser Phe Arg Tyr Gly Ser Ser Cys Glu Phe Ser Cys Glu Gln
 385 390 395 400
 Gly Phe Val Leu Lys Gly Ser Lys Arg Leu Gln Cys Gly Pro Thr Gly
 405 410 415
 Glu Trp Asp Asn Glu Lys Pro Thr Cys Glu Ala Val Arg Cys Asp Ala
 420 425 430
 Val His Gln Pro Pro Lys Gly Leu Val Arg Cys Ala His Ser Pro Ile
 435 440 445
 Gly Glu Phe Thr Tyr Lys Ser Ser Cys Ala Phe Ser Cys Glu Glu Gly
 450 455 460
 Phe Glu Leu Tyr Gly Ser Thr Gln Leu Glu Cys Thr Ser Gln Gly Gln
 465 470 475 480
 Trp Thr Glu Glu Val Pro Ser Cys Gln Val Lys Cys Ser Ser Leu
 485 490 495
 Ala Val Pro Gly Lys Ile Asn Met Ser Cys Ser Gly Glu Pro Val Phe
 500 505 510
 Gly Thr Val Cys Lys Phe Ala Cys Pro Glu Gly Trp Thr Leu Asn Gly
 515 520 525
 Ser Ala Ala Arg Thr Cys Gly Ala Thr Gly His Trp Ser Gly Leu Leu
 530 535 540
 Pro Thr Cys Glu Ala Pro Thr Glu Ser Asn Ile Pro Leu Val Ala Gly
 545 550 555 560
 Leu Ser Ala Ala Gly Leu Ser Leu Leu Thr Leu Ala Pro Phe Leu Leu
 565 570 575
 Trp Leu Arg Lys Cys Leu Arg Lys Ala Lys Lys Phe Val Pro Ala Ser
 580 585 590
 Ser Cys Gln Ser Leu Glu Ser Asp Gly Ser Tyr Gln Lys Pro Ser Tyr
 595 600 605
 Ile Leu
 610

<210> 123
 <211> 352
 <212> PRT
 <213> Homo sapiens

<400> 123
 Met Glu Gly Ile Ser Ile Tyr Thr Ser Asp Asn Tyr Thr Glu Glu Met
 1 5 10 15
 Gly Ser Gly Asp Tyr Asp Ser Met Lys Glu Pro Cys Phe Arg Glu Glu
 20 25 30
 Asn Ala Asn Phe Asn Lys Ile Phe Leu Pro Thr Ile Tyr Ser Ile Ile
 35 40 45
 Phe Leu Thr Gly Ile Val Gly Asn Gly Leu Val Ile Leu Val Met Gly
 50 55 60
 Tyr Gln Lys Lys Leu Arg Ser Met Thr Asp Lys Tyr Arg Leu His Leu
 65 70 75 80
 Ser Val Ala Asp Leu Leu Phe Val Ile Thr Leu Pro Phe Trp Ala Val
 85 90 95
 Asp Ala Val Ala Asn Trp Tyr Phe Gly Asn Phe Leu Cys Lys Ala Val
 100 105 110
 His Val Ile Tyr Thr Val Asn Leu Tyr Ser Ser Val Leu Ile Leu Ala
 115 120 125
 Phe Ile Ser Leu Asp Arg Tyr Leu Ala Ile Val His Ala Thr Asn Ser
 130 135 140
 Gln Arg Pro Arg Lys Leu Leu Ala Glu Lys Val Val Tyr Val Gly Val
 145 150 155 160
 Trp Ile Pro Ala Leu Leu Leu Thr Ile Pro Asp Phe Ile Phe Ala Asn
 165 170 175
 Val Ser Glu Ala Asp Asp Arg Tyr Ile Cys Asp Arg Phe Tyr Pro Asn
 180 185 190
 Asp Leu Trp Val Val Val Phe Gln Phe Gln His Ile Met Val Gly Leu
 195 200 205
 Ile Leu Pro Gly Ile Val Ile Leu Ser Cys Tyr Cys Ile Ile Ile Ser
 210 215 220
 Lys Leu Ser His Ser Lys Gly His Gln Lys Arg Lys Ala Leu Lys Thr
 225 230 235 240
 Thr Val Ile Leu Ile Leu Ala Phe Phe Ala Cys Trp Leu Pro Tyr Tyr
 245 250 255
 Ile Gly Ile Ser Ile Asp Ser Phe Ile Leu Leu Glu Ile Ile Lys Gln
 260 265 270
 Gly Cys Glu Phe Glu Asn Thr Val His Lys Trp Ile Ser Ile Thr Glu
 275 280 285
 Ala Leu Ala Phe Phe His Cys Cys Leu Asn Pro Ile Leu Tyr Ala Phe
 290 295 300
 Leu Gly Ala Lys Phe Lys Thr Ser Ala Gln His Ala Leu Thr Ser Val
 305 310 315 320
 Ser Arg Gly Ser Ser Leu Lys Ile Leu Ser Lys Gly Lys Arg Gly Gly
 325 330 335
 His Ser Ser Val Ser Thr Glu Ser Glu Ser Ser Ser Phe His Ser Ser
 340 345 350

<210> 124
 <211> 184
 <212> PRT
 <213> Homo sapiens

<400> 124
 Met Lys Ser Val Leu Leu Thr Thr Leu Leu Val Pro Ala His Leu
 1 5 10 15
 Val Ala Ala Trp Ser Asn Asn Tyr Ala Val Asp Cys Pro Gln His Cys
 20 25 30
 Asp Ser Ser Glu Cys Lys Ser Ser Pro Arg Cys Lys Arg Thr Val Leu
 35 40 45
 Asp Asp Cys Gly Cys Cys Arg Val Cys Ala Ala Gly Arg Gly Glu Thr
 50 55 60

Cys Tyr Arg Thr Val Ser Gly Met Asp Gly Met Lys Cys Gly Pro Gly
 65 70 75 80
 Leu Arg Cys Gln Pro Ser Asn Gly Glu Asp Pro Phe Gly Glu Glu Phe
 85 90 95
 Gly Ile Cys Lys Asp Cys Pro Tyr Gly Thr Phe Gly Met Asp Cys Arg
 100 105 110
 Glu Thr Cys Asn Cys Gln Ser Gly Ile Cys Asp Arg Gly Thr Gly Lys
 115 120 125
 Cys Leu Lys Phe Pro Phe Phe Gln Tyr Ser Val Thr Lys Ser Ser Asn
 130 135 140
 Arg Phe Val Ser Leu Thr Glu His Asp Met Ala Ser Gly Asp Gly Asn
 145 150 155 160
 Ile Val Arg Glu Glu Val Val Lys Glu Asn Ala Ala Gly Ser Pro Val
 165 170 175
 Met Arg Lys Trp Leu Asn Pro Arg
 180

<210> 125

<211> 1496

<212> PRT

<213> Homo sapiens

<400> 125

Ser Arg Pro Trp Trp Leu Arg Ala Ser Glu Arg Pro Ser Ala Pro Ser
 1 5 10 15
 Ala Met Ala Lys Arg Ser Arg Gly Pro Gly Arg Arg Cys Leu Leu Ala
 20 25 30
 Leu Val Leu Phe Cys Ala Trp Gly Thr Leu Ala Val Val Ala Gln Lys
 35 40 45
 Pro Gly Ala Gly Cys Pro Ser Arg Cys Leu Cys Phe Arg Thr Thr Val
 50 55 60
 Arg Cys Met His Leu Leu Leu Glu Ala Val Pro Ala Val Ala Pro Gln
 65 70 75 80
 Thr Ser Ile Leu Asp Leu Arg Phe Asn Arg Ile Arg Glu Ile Gln Pro
 85 90 95
 Gly Ala Phe Arg Arg Leu Arg Asn Leu Asn Thr Leu Leu Leu Asn Asn
 100 105 110
 Asn Gln Ile Lys Arg Ile Pro Ser Gly Ala Phe Glu Asp Leu Glu Asn
 115 120 125
 Leu Lys Tyr Leu Tyr Leu Tyr Lys Asn Glu Ile Gln Ser Ile Asp Arg
 130 135 140
 Gln Ala Phe Lys Gly Leu Ala Ser Leu Glu Gln Leu Tyr Leu His Phe
 145 150 155 160
 Asn Gln Ile Glu Thr Leu Asp Pro Asp Ser Phe Gln His Leu Pro Lys
 165 170 175
 Leu Glu Arg Leu Phe Leu His Asn Asn Arg Ile Thr His Leu Val Pro
 180 185 190
 Gly Thr Phe Asn His Leu Glu Ser Met Lys Arg Leu Arg Leu Asp Ser
 195 200 205
 Asn Thr Leu His Cys Asp Cys Glu Ile Leu Trp Leu Ala Asp Leu Leu
 210 215 220
 Lys Thr Tyr Ala Glu Ser Gly Asn Ala Gln Ala Ala Ile Cys Glu
 225 230 235 240
 Tyr Pro Arg Arg Ile Gln Gly Arg Ser Val Ala Thr Ile Thr Pro Glu
 245 250 255
 Glu Leu Asn Cys Glu Arg Pro Arg Ile Thr Ser Glu Pro Gln Asp Ala
 260 265 270
 Asp Val Thr Ser Gly Asn Thr Val Tyr Phe Thr Cys Arg Ala Glu Gly
 275 280 285
 Asn Pro Lys Pro Glu Ile Ile Trp Leu Arg Asn Asn Asn Glu Leu Ser
 290 295 300

Met	Lys	Thr	Asp	Ser	Arg	Leu	Asn	Leu	Leu	Asp	Asp	Gly	Thr	Leu	Met
305					310					315					320
Ile	Gln	Asn	Thr	Gln	Glu	Thr	Asp	Gln	Gly	Ile	Tyr	Gln	Cys	Met	Ala
				325					330						335
Lys	Asn	Val	Ala	Gly	Glu	Val	Lys	Thr	Gln	Glu	Val	Thr	Leu	Arg	Tyr
			340					345					350		
Phe	Gly	Ser	Pro	Ala	Arg	Pro	Thr	Phe	Val	Ile	Gln	Pro	Gln	Asn	Thr
		355					360					365			
Glu	Val	Leu	Val	Gly	Glu	Ser	Val	Thr	Leu	Glu	Cys	Ser	Ala	Thr	Gly
		370				375					380				
His	Pro	Pro	Pro	Arg	Ile	Ser	Trp	Thr	Arg	Gly	Asp	Arg	Thr	Pro	Leu
385					390					395					400
Pro	Val	Asp	Pro	Arg	Val	Asn	Ile	Thr	Pro	Ser	Gly	Gly	Leu	Tyr	Ile
				405					410						415
Gln	Asn	Val	Val	Gln	Gly	Asp	Ser	Gly	Glu	Tyr	Ala	Cys	Ser	Ala	Thr
			420					425					430		
Asn	Asn	Ile	Asp	Ser	Val	His	Ala	Thr	Ala	Phe	Ile	Ile	Val	Gln	Ala
		435					440					445			
Leu	Pro	Gln	Phe	Thr	Val	Thr	Pro	Gln	Asp	Arg	Val	Val	Ile	Glu	Gly
		450				455					460				
Gln	Thr	Val	Asp	Phe	Gln	Cys	Glu	Ala	Lys	Gly	Asn	Pro	Pro	Pro	Val
465					470					475					480
Ile	Ala	Trp	Thr	Lys	Gly	Gly	Ser	Gln	Leu	Ser	Val	Asp	Arg	Arg	His
				485					490					495	
Leu	Val	Leu	Ser	Ser	Gly	Thr	Leu	Arg	Ile	Ser	Gly	Val	Ala	Leu	His
			500					505					510		
Asp	Gln	Gly	Gln	Tyr	Glu	Cys	Gln	Ala	Val	Asn	Ile	Ile	Gly	Ser	Gln
		515					520					525			
Lys	Val	Val	Ala	His	Leu	Thr	Val	Gln	Pro	Arg	Val	Thr	Pro	Val	Phe
		530				535					540				
Ala	Ser	Ile	Pro	Ser	Asp	Thr	Thr	Val	Glu	Val	Gly	Ala	Asn	Val	Gln
545					550					555					560
Leu	Pro	Cys	Ser	Ser	Gln	Gly	Glu	Pro	Glu	Pro	Ala	Ile	Thr	Trp	Asn
				565					570					575	
Lys	Asp	Gly	Val	Gln	Val	Thr	Glu	Ser	Gly	Lys	Phe	His	Ile	Ser	Pro
			580					585					590		
Glu	Gly	Phe	Leu	Thr	Ile	Asn	Asp	Val	Gly	Pro	Ala	Asp	Ala	Gly	Arg
		595					600					605			
Tyr	Glu	Cys	Val	Ala	Arg	Asn	Thr	Ile	Gly	Ser	Ala	Ser	Val	Ser	Met
		610				615					620				
Val	Leu	Ser	Val	Asn	Val	Pro	Asp	Val	Ser	Arg	Asn	Gly	Asp	Pro	Phe
625					630					635					640
Val	Ala	Thr	Ser	Ile	Val	Glu	Ala	Ile	Ala	Thr	Val	Asp	Arg	Ala	Ile
				645					650					655	
Asn	Ser	Thr	Arg	Thr	His	Leu	Phe	Asp	Ser	Arg	Pro	Arg	Ser	Pro	Asn
			660					665					670		
Asp	Leu	Leu	Ala	Leu	Phe	Arg	Tyr	Pro	Arg	Asp	Pro	Tyr	Thr	Val	Glu
			675				680					685			
Gln	Ala	Arg	Ala	Gly	Glu	Ile	Phe	Glu	Arg	Thr	Leu	Gln	Leu	Ile	Gln
						695					700				
Glu	His	Val	Gln	His	Gly	Leu	Met	Val	Asp	Leu	Asn	Gly	Thr	Ser	Tyr
705					710					715					720
His	Tyr	Asn	Asp	Leu	Val	Ser	Pro	Gln	Tyr	Leu	Asn	Leu	Ile	Ala	Asn
				725					730					735	
Leu	Ser	Gly	Cys	Thr	Ala	His	Arg	Arg	Val	Asn	Asn	Cys	Ser	Asp	Met
			740					745					750		
Cys	Phe	His	Gln	Lys	Tyr	Arg	Thr	His	Asp	Gly	Thr	Cys	Asn	Asn	Leu
		755					760					765			
Gln	His	Pro	Met	Trp	Gly	Ala	Ser	Leu	Thr	Ala	Phe	Glu	Arg	Leu	Leu
		770					775					780			

Arg Leu Trp Tyr Glu Asn Pro Gly Val Phe Ser Pro Ala Gln Leu Thr
 1265 1270 1275 1280
 Gln Ile Lys Gln Thr Ser Leu Ala Arg Ile Leu Cys Asp Asn Ala Asp
 1285 1290 1295
 Asn Ile Thr Arg Val Gln Ser Asp Val Phe Arg Val Ala Glu Phe Pro
 1300 1305 1310
 His Gly Tyr Gly Ser Cys Asp Glu Ile Pro Arg Val Asp Leu Arg Val
 1315 1320 1325
 Trp Gln Asp Cys Cys Glu Asp Cys Arg Thr Arg Gly Gln Phe Asn Ala
 1330 1335 1340
 Phe Ser Tyr His Phe Arg Gly Arg Arg Ser Leu Glu Phe Ser Tyr Gln
 1345 1350 1355 1360
 Glu Asp Lys Pro Thr Lys Lys Thr Arg Pro Arg Lys Ile Pro Ser Val
 1365 1370 1375
 Gly Arg Gln Gly Glu His Leu Ser Asn Ser Thr Ser Ala Phe Ser Thr
 1380 1385 1390
 Arg Ser Asp Ala Ser Gly Thr Asn Asp Phe Arg Glu Phe Val Leu Glu
 1395 1400 1405
 Met Gln Lys Thr Ile Thr Asp Leu Arg Thr Gln Ile Lys Lys Leu Glu
 1410 1415 1420
 Ser Arg Leu Ser Thr Thr Glu Cys Val Asp Ala Gly Gly Glu Ser His
 1425 1430 1435 1440
 Ala Asn Asn Thr Lys Trp Lys Lys Asp Ala Cys Thr Ile Cys Glu Cys
 1445 1450 1455
 Lys Asp Gly Gln Val Thr Cys Phe Val Glu Ala Cys Pro Pro Ala Thr
 1460 1465 1470
 Cys Ala Val Pro Val Asn Ile Pro Gly Ala Cys Cys Pro Val Cys Leu
 1475 1480 1485
 Gln Lys Arg Ala Glu Glu Lys Pro
 1490 1495

<210> 126

<211> 1165

<212> PRT

<213> Homo sapiens

<400> 126

Met Ala Asn Asp Ser Pro Ala Lys Ser Leu Val Asp Ile Asp Leu Ser
 1 5 10 15
 Ser Leu Arg Asp Pro Ala Gly Ile Phe Glu Leu Val Glu Val Val Gly
 20 25 30
 Asn Gly Thr Tyr Gly Gln Val Tyr Lys Gly Arg His Val Lys Thr Gly
 35 40 45
 Gln Leu Ala Ala Ile Lys Val Met Asp Val Thr Glu Asp Glu Glu Glu
 50 55 60
 Glu Ile Lys Leu Glu Ile Asn Met Leu Lys Lys Tyr Ser His His Arg
 65 70 75 80
 Asn Ile Ala Thr Tyr Tyr Gly Ala Phe Ile Lys Lys Ser Pro Pro Gly
 85 90 95
 His Asp Asp Gln Leu Trp Leu Val Met Glu Phe Cys Gly Ala Gly Ser
 100 105 110
 Ile Thr Asp Leu Val Lys Asn Thr Lys Gly Asn Thr Leu Lys Glu Asp
 115 120 125
 Trp Ile Ala Tyr Ile Ser Arg Glu Ile Leu Arg Gly Leu Ala His Leu
 130 135 140
 His Ile His His Val Ile His Arg Asp Ile Lys Gly Gln Asn Val Leu
 145 150 155 160
 Leu Thr Glu Asn Ala Glu Val Lys Leu Val Asp Phe Gly Val Ser Ala
 165 170 175
 Gln Leu Asp Arg Thr Val Gly Arg Arg Asn Thr Phe Ile Gly Thr Pro
 180 185 190

Tyr	Trp	Met	Ala	Pro	Glu	Val	Ile	Ala	Cys	Asp	Glu	Asn	Pro	Asp	Ala
		195					200					205			
Thr	Tyr	Asp	Tyr	Arg	Ser	Asp	Leu	Trp	Ser	Cys	Gly	Ile	Thr	Ala	Ile
	210					215					220				
Glu	Met	Ala	Glu	Gly	Ala	Pro	Pro	Leu	Cys	Asp	Met	His	Pro	Met	Arg
225					230					235					240
Ala	Leu	Phe	Leu	Ile	Pro	Arg	Asn	Pro	Pro	Pro	Arg	Leu	Lys	Ser	Lys
			245					250						255	
Lys	Trp	Ser	Lys	Lys	Phe	Phe	Ser	Phe	Ile	Glu	Gly	Cys	Leu	Val	Lys
			260					265					270		
Asn	Tyr	Met	Gln	Arg	Pro	Ser	Thr	Glu	Gln	Leu	Leu	Lys	His	Pro	Phe
	275						280						285		
Ile	Arg	Asp	Gln	Pro	Asn	Glu	Arg	Gln	Val	Arg	Ile	Gln	Leu	Lys	Asp
	290					295					300				
His	Ile	Asp	Arg	Thr	Arg	Lys	Lys	Arg	Gly	Glu	Lys	Asp	Glu	Thr	Glu
305					310						315				320
Tyr	Glu	Tyr	Ser	Gly	Ser	Glu	Glu	Glu	Glu	Glu	Glu	Val	Pro	Glu	Gln
				325					330					335	
Glu	Gly	Glu	Pro	Ser	Ser	Ile	Val	Asn	Val	Pro	Gly	Glu	Ser	Thr	Leu
			340					345					350		
Arg	Arg	Asp	Phe	Leu	Arg	Leu	Gln	Gln	Glu	Asn	Lys	Glu	Arg	Ser	Glu
		355					360					365			
Ala	Leu	Arg	Arg	Gln	Gln	Leu	Leu	Gln	Glu	Gln	Gln	Leu	Arg	Glu	Gln
	370					375					380				
Glu	Glu	Tyr	Lys	Arg	Gln	Leu	Leu	Ala	Glu	Arg	Gln	Lys	Arg	Ile	Glu
385					390					395					400
Gln	Gln	Lys	Glu	Gln	Arg	Arg	Arg	Leu	Glu	Glu	Gln	Gln	Arg	Arg	Glu
				405					410					415	
Arg	Glu	Ala	Arg	Arg	Gln	Gln	Glu	Arg	Glu	Gln	Arg	Arg	Arg	Glu	Gln
			420					425					430		
Glu	Glu	Lys	Arg	Arg	Leu	Glu	Glu	Leu	Glu	Arg	Arg	Arg	Lys	Glu	Glu
		435					440					445			
Glu	Glu	Arg	Arg	Arg	Ala	Glu	Glu	Glu	Lys	Arg	Arg	Val	Glu	Arg	Glu
	450					455						460			
Gln	Glu	Tyr	Ile	Arg	Arg	Gln	Leu	Glu	Glu	Glu	Gln	Arg	His	Leu	Glu
465					470					475					480
Val	Leu	Gln	Gln	Gln	Leu	Leu	Gln	Glu	Gln	Ala	Met	Leu	Leu	His	Asp
				485					490					495	
His	Arg	Arg	Pro	His	Pro	Gln	His	Ser	Gln	Gln	Pro	Pro	Pro	Pro	Gln
			500					505					510		
Gln	Glu	Arg	Ser	Lys	Pro	Ser	Phe	His	Ala	Pro	Glu	Pro	Lys	Ala	His
		515					520						525		
Tyr	Glu	Pro	Ala	Asp	Arg	Ala	Arg	Glu	Val	Pro	Val	Arg	Thr	Thr	Ser
	530					535						540			
Arg	Ser	Pro	Val	Leu	Ser	Arg	Arg	Asp	Ser	Pro	Leu	Gln	Gly	Ser	Gly
545					550					555					560
Gln	Gln	Asn	Ser	Gln	Ala	Gly	Gln	Arg	Asn	Ser	Thr	Ser	Ile	Glu	Pro
				565					570					575	
Arg	Leu	Leu	Trp	Glu	Arg	Val	Glu	Lys	Leu	Val	Pro	Arg	Pro	Gly	Ser
			580					585					590		
Gly	Ser	Ser	Ser	Gly	Ser	Ser	Asn	Ser	Gly	Ser	Gln	Pro	Gly	Ser	His
		595					600					605			
Pro	Gly	Ser	Gln	Ser	Gly	Ser	Gly	Glu	Arg	Phe	Arg	Val	Arg	Ser	Ser
	610						615					620			
Ser	Lys	Ser	Glu	Gly	Ser	Pro	Ser	Gln	Arg	Leu	Glu	Asn	Ala	Val	Lys
625					630					635					640
Lys	Pro	Glu	Asp	Lys	Lys	Glu	Val	Phe	Arg	Pro	Leu	Lys	Pro	Ala	Gly
				645					650					655	
Glu	Val	Asp	Leu	Thr	Ala	Leu	Ala	Lys	Glu	Leu	Arg	Ala	Val	Glu	Asp
			660					665					670		

Tyr Phe Met Thr Leu Gly Arg Thr Ser Leu Leu Ser Trp
 1155 1160 1165

<210> 127
 <211> 541
 <212> PRT
 <213> Homo sapiens

<400> 127
 Met Gly Ser Ser Glu Val Ser Ile Ile Pro Gly Leu Gln Lys Glu Glu
 1 5 10 15
 Lys Ala Ala Val Glu Arg Arg Arg Leu His Val Leu Lys Ala Leu Lys
 20 25 30
 Lys Leu Arg Ile Glu Ala Asp Glu Ala Pro Val Val Ala Val Leu Gly
 35 40 45
 Ser Gly Gly Gly Leu Arg Ala His Ile Ala Cys Leu Gly Val Leu Ser
 50 55 60
 Glu Met Lys Glu Gln Gly Leu Leu Asp Ala Val Thr Tyr Leu Ala Gly
 65 70 75 80
 Val Ser Gly Ser Thr Trp Ala Ile Ser Ser Leu Tyr Thr Asn Asp Gly
 85 90 95
 Asp Met Glu Ala Leu Glu Ala Asp Leu Lys His Arg Phe Thr Arg Gln
 100 105 110
 Glu Trp Asp Leu Ala Lys Ser Leu Gln Lys Thr Ile Gln Ala Ala Arg
 115 120 125
 Ser Glu Asn Tyr Ser Leu Thr Asp Phe Trp Ala Tyr Met Val Ile Ser
 130 135 140
 Lys Gln Thr Arg Glu Leu Pro Glu Ser His Leu Ser Asn Met Lys Lys
 145 150 155 160
 Pro Val Glu Glu Gly Thr Leu Pro Tyr Pro Ile Phe Ala Ala Ile Asp
 165 170 175
 Asn Asp Leu Gln Pro Ser Trp Gln Glu Ala Arg Ala Pro Glu Thr Trp
 180 185 190
 Phe Glu Phe Thr Pro His His Ala Gly Phe Ser Ala Leu Gly Ala Phe
 195 200 205
 Val Ser Ile Thr His Phe Gly Ser Lys Phe Lys Lys Gly Arg Leu Val
 210 215 220
 Arg Thr His Pro Glu Arg Asp Leu Thr Phe Leu Arg Gly Leu Trp Gly
 225 230 235 240
 Ser Ala Leu Gly Asn Thr Glu Val Ile Arg Glu Tyr Ile Phe Asp Gln
 245 250 255
 Leu Arg Asn Leu Thr Leu Lys Gly Leu Trp Arg Arg Ala Val Ala Asn
 260 265 270
 Ala Lys Ser Ile Gly His Leu Ile Phe Ala Arg Leu Leu Arg Leu Gln
 275 280 285
 Glu Ser Ser Gln Gly Glu His Pro Pro Glu Asp Glu Gly Gly Glu
 290 295 300
 Pro Glu His Thr Trp Leu Thr Glu Met Leu Glu Asn Trp Thr Arg Thr
 305 310 315 320
 Ser Leu Glu Lys Gln Glu Gln Pro His Glu Asp Pro Glu Arg Lys Gly
 325 330 335
 Ser Leu Ser Asn Leu Met Asp Phe Val Lys Lys Thr Gly Ile Cys Ala
 340 345 350
 Ser Lys Trp Glu Trp Gly Thr Thr His Asn Phe Leu Tyr Lys His Gly
 355 360 365
 Gly Ile Arg Asp Lys Ile Met Ser Ser Arg Lys His Leu His Leu Val
 370 375 380
 Asp Ala Gly Leu Ala Ile Asn Thr Pro Phe Pro Leu Val Leu Pro Pro
 385 390 395 400
 Thr Arg Glu Val His Leu Ile Leu Ser Phe Asp Phe Ser Ala Gly Asp
 405 410 415

Pro Phe Glu Thr Ile Arg Ala Thr Thr Asp Tyr Cys Arg Arg His Lys
 420 425 430
 Ile Pro Phe Pro Gln Val Glu Glu Ala Glu Leu Asp Leu Trp Ser Lys
 435 440 445
 Ala Pro Ala Ser Cys Tyr Ile Leu Lys Gly Glu Thr Gly Pro Val Val
 450 455 460
 Ile His Phe Pro Leu Phe Asn Ile Asp Ala Cys Gly Gly Asp Ile Glu
 465 470 475 480
 Ala Trp Ser Asp Thr Tyr Asp Thr Phe Lys Leu Ala Asp Thr Tyr Thr
 485 490 495
 Leu Asp Val Val Val Leu Leu Leu Ala Leu Ala Lys Lys Asn Val Arg
 500 505 510
 Glu Asn Lys Lys Lys Ile Leu Arg Glu Leu Met Asn Val Ala Gly Leu
 515 520 525
 Tyr Tyr Pro Lys Asp Ser Ala Arg Ser Cys Cys Leu Ala
 530 535 540

<210> 128
 <211> 411
 <212> PRT
 <213> Homo sapiens

<400> 128
 Met Gln Cys Ser Trp Lys Ala Val Leu Leu Leu Ala Leu Ala Ser Ile
 1 5 10 15
 Ala Ile Gln Tyr Thr Ala Ile Arg Thr Phe Thr Ala Lys Ser Phe His
 20 25 30
 Thr Cys Pro Gly Leu Ala Glu Ala Gly Leu Ala Glu Arg Leu Cys Glu
 35 40 45
 Glu Ser Pro Thr Phe Ala Tyr Asn Leu Ser Arg Lys Thr His Ile Leu
 50 55 60
 Ile Leu Ala Thr Thr Arg Ser Gly Ser Ser Phe Val Gly Gln Leu Phe
 65 70 75 80
 Asn Gln His Leu Asp Val Phe Tyr Leu Phe Glu Pro Leu Tyr His Val
 85 90 95
 Gln Asn Thr Leu Ile Pro Arg Phe Thr Gln Gly Lys Ser Pro Ala Asp
 100 105 110
 Arg Arg Val Met Leu Gly Ala Ser Arg Asp Leu Leu Arg Ser Leu Tyr
 115 120 125
 Asp Cys Asp Leu Tyr Phe Leu Glu Asn Tyr Ile Lys Pro Pro Pro Val
 130 135 140
 Asn His Thr Thr Asp Arg Ile Phe Arg Arg Gly Ala Ser Arg Val Leu
 145 150 155 160
 Cys Ser Arg Pro Val Cys Asp Pro Pro Gly Pro Ala Asp Leu Val Leu
 165 170 175
 Glu Glu Gly Asp Cys Val Arg Lys Cys Gly Leu Leu Asn Leu Thr Val
 180 185 190
 Ala Ala Glu Ala Cys Arg Glu Arg Ser His Val Ala Ile Lys Thr Val
 195 200 205
 Arg Val Pro Glu Val Asn Asp Leu Arg Ala Leu Val Glu Asp Pro Arg
 210 215 220
 Leu Asn Leu Lys Val Ile Gln Leu Val Arg Asp Pro Arg Gly Ile Leu
 225 230 235 240
 Ala Ser Arg Ser Glu Thr Phe Arg Asp Thr Tyr Arg Leu Trp Arg Leu
 245 250 255
 Trp Tyr Gly Thr Gly Arg Lys Pro Tyr Asn Leu Asp Val Thr Gln Leu
 260 265 270
 Thr Thr Val Cys Glu Asp Phe Ser Asn Ser Val Ser Thr Gly Leu Met
 275 280 285
 Arg Pro Pro Trp Leu Lys Gly Lys Tyr Met Leu Val Arg Tyr Glu Asp
 290 295 300

Leu Ala Arg Asn Pro Met Lys Lys Thr Glu Glu Ile Tyr Gly Phe Leu
 305 310 315 320
 Gly Ile Pro Leu Asp Ser His Val Ala Arg Trp Ile Gln Asn Asn Thr
 325 330 335
 Arg Gly Asp Pro Thr Leu Gly Lys His Lys Tyr Gly Thr Val Arg Asn
 340 345 350
 Ser Ala Ala Thr Ala Glu Lys Trp Arg Phe Arg Leu Ser Tyr Asp Ile
 355 360 365
 Val Ala Phe Ala Gln Asn Ala Cys Gln Gln Val Leu Ala Gln Leu Gly
 370 375 380
 Tyr Lys Ile Ala Ala Ser Glu Glu Glu Leu Lys Asn Pro Ser Val Ser
 385 390 395 400
 Leu Val Glu Glu Arg Asp Phe Arg Pro Phe Ser
 405 410

<210> 129

<211> 1228

<212> PRT

<213> Homo sapiens

<400> 129

Met Lys Gly Ala Arg Leu Phe Val Leu Leu Ser Ser Leu Trp Ser Gly
 1 5 10 15
 Gly Ile Gly Leu Asn Asn Ser Lys His Ser Trp Thr Ile Pro Glu Asp
 20 25 30
 Gly Asn Ser Gln Lys Thr Met Pro Ser Ala Ser Val Pro Pro Asn Lys
 35 40 45
 Ile Gln Ser Leu Gln Ile Leu Pro Thr Thr Arg Val Met Ser Ala Glu
 50 55 60
 Ile Ala Thr Thr Pro Glu Ala Arg Thr Ser Glu Asp Ser Leu Leu Lys
 65 70 75 80
 Ser Thr Leu Pro Pro Ser Glu Thr Ser Ala Pro Ala Glu Gly Val Arg
 85 90 95
 Asn Gln Thr Leu Thr Ser Thr Glu Lys Ala Glu Gly Val Val Lys Leu
 100 105 110
 Gln Asn Leu Thr Leu Pro Thr Asn Ala Ser Ile Lys Phe Asn Pro Gly
 115 120 125
 Ala Glu Ser Val Val Leu Ser Asn Ser Thr Leu Lys Phe Leu Gln Ser
 130 135 140
 Phe Ala Arg Lys Ser Asn Glu Gln Ala Thr Ser Leu Asn Thr Val Gly
 145 150 155 160
 Gly Thr Gly Gly Ile Gly Gly Val Gly Gly Thr Gly Gly Val Gly Asn
 165 170 175
 Arg Ala Pro Arg Glu Thr Tyr Leu Ser Arg Gly Asp Ser Ser Ser Ser
 180 185 190
 Gln Arg Thr Asp Tyr Gln Lys Ser Asn Phe Glu Thr Thr Arg Gly Lys
 195 200 205
 Asn Trp Cys Ala Tyr Val His Thr Arg Leu Ser Pro Thr Val Thr Leu
 210 215 220
 Asp Asn Gln Val Thr Tyr Val Pro Gly Gly Lys Gly Pro Cys Gly Trp
 225 230 235 240
 Thr Gly Gly Ser Cys Pro Gln Arg Ser Gln Lys Ile Ser Asn Pro Val
 245 250 255
 Tyr Arg Met Gln His Lys Ile Val Thr Ser Leu Asp Trp Arg Cys Cys
 260 265 270
 Pro Gly Tyr Ser Gly Pro Lys Cys Gln Leu Arg Ala Gln Glu Gln Gln
 275 280 285
 Ser Leu Ile His Thr Asn Gln Ala Glu Ser His Thr Ala Val Gly Arg
 290 295 300
 Gly Val Ala Glu Gln Gln Gln Gln Gly Cys Gly Asp Pro Glu Val
 305 310 315 320

Met	Gln	Lys	Met	Thr	Asp	Gln	Val	Asn	Tyr	Gln	Ala	Met	Lys	Leu	Thr		
				325					330					335			
Leu	Leu	Gln	Lys	Ile	Asp	Asn	Ile	Ser	Leu	Thr	Val	Asn	Asp	Val			
			340				345						350				
Arg	Asn	Thr	Tyr	Ser	Ser	Leu	Glu	Gly	Lys	Val	Ser	Glu	Asp	Lys	Ser		
			355				360						365				
Arg	Glu	Phe	Gln	Ser	Leu	Leu	Lys	Gly	Leu	Lys	Ser	Lys	Ser	Ile	Asn		
	370					375						380					
Val	Leu	Ile	Arg	Asp	Ile	Val	Arg	Glu	Gln	Phe	Lys	Ile	Phe	Gln	Asn		
	385				390					395					400		
Asp	Met	Gln	Glu	Thr	Val	Ala	Gln	Leu	Phe	Lys	Thr	Val	Ser	Ser	Leu		
				405					410					415			
Ser	Glu	Asp	Leu	Glu	Ser	Thr	Arg	Gln	Ile	Ile	Gln	Lys	Val	Asn	Glu		
			420					425					430				
Ser	Val	Val	Ser	Ile	Ala	Ala	Gln	Gln	Lys	Phe	Val	Leu	Val	Gln	Glu		
		435					440					445					
Asn	Arg	Pro	Thr	Leu	Thr	Asp	Ile	Val	Glu	Leu	Arg	Asn	His	Ile	Val		
	450					455					460						
Asn	Val	Arg	Gln	Glu	Met	Thr	Leu	Thr	Cys	Glu	Lys	Pro	Ile	Lys	Glu		
	465				470				475						480		
Leu	Glu	Val	Lys	Gln	Thr	His	Leu	Glu	Gly	Ala	Leu	Glu	Gln	Glu	His		
				485					490					495			
Ser	Arg	Ser	Ile	Leu	Tyr	Tyr	Glu	Ser	Leu	Asn	Lys	Thr	Leu	Ser	Lys		
			500					505					510				
Leu	Lys	Glu	Val	His	Glu	Gln	Leu	Leu	Ser	Thr	Glu	Gln	Val	Ser	Asp		
		515					520						525				
Gln	Lys	Asn	Ala	Pro	Ala	Ala	Glu	Ser	Val	Ser	Asn	Asn	Val	Thr	Glu		
		530				535						540					
Tyr	Met	Ser	Thr	Leu	His	Glu	Asn	Ile	Lys	Lys	Gln	Ser	Leu	Met	Met		
	545				550					555					560		
Leu	Gln	Met	Phe	Glu	Asp	Leu	His	Ile	Gln	Glu	Ser	Lys	Ile	Asn	Asn		
			565						570					575			
Leu	Thr	Val	Ser	Leu	Glu	Met	Glu	Lys	Glu	Ser	Leu	Arg	Gly	Glu	Cys		
			580					585					590				
Glu	Asp	Met	Leu	Ser	Lys	Cys	Arg	Asn	Asp	Phe	Lys	Phe	Gln	Leu	Lys		
		595					600					605					
Asp	Thr	Glu	Glu	Asn	Leu	His	Val	Leu	Asn	Gln	Thr	Leu	Ala	Glu	Val		
	610					615						620					
Leu	Phe	Pro	Met	Asp	Asn	Lys	Met	Asp	Lys	Met	Ser	Glu	Gln	Leu	Asn		
			625			630				635					640		
Asp	Leu	Thr	Tyr	Asp	Met	Glu	Ile	Leu	Gln	Pro	Leu	Leu	Glu	Gln	Gly		
			645						650					655			
Ala	Ser	Leu	Arg	Gln	Thr	Met	Thr	Tyr	Glu	Gln	Pro	Lys	Glu	Ala	Ile		
			660					665					670				
Val	Ile	Arg	Lys	Lys	Ile	Glu	Asn	Leu	Thr	Ser	Ala	Val	Asn	Ser	Leu		
		675						680				685					
Asn	Phe	Ile	Ile	Lys	Glu	Leu	Thr	Lys	Arg	His	Asn	Leu	Leu	Arg	Asn		
		690				695						700					
Glu	Val	Gln	Gly	Arg	Asp	Asp	Ala	Leu	Glu	Arg	Arg	Ile	Asn	Glu	Tyr		
			705		710					715					720		
Ala	Leu	Glu	Met	Glu	Asp	Gly	Leu	Asn	Lys	Thr	Met	Thr	Ile	Ile	Asn		
			725						730					735			
Asn	Ala	Ile	Asp	Phe	Ile	Gln	Asp	Asn	Tyr	Ala	Leu	Lys	Glu	Thr	Leu		
			740					745					750				
Ser	Thr	Ile	Lys	Asp	Asn	Ser	Glu	Ile	His	His	Lys	Cys	Thr	Ser	Asp		
		755					760					765					
Met	Glu	Thr	Ile	Leu	Thr	Phe	Ile	Pro	Gln	Phe	His	Arg	Leu	Asn	Asp		
		770				775						780					
Ser	Ile	Gln	Thr	Leu	Val	Asn	Asp	Asn	Gln	Arg	Tyr	Asn	Phe	Val	Leu		
					790					795					800		

Gln Val Ala Lys Thr Leu Ala Gly Ile Pro Arg Asp Glu Lys Leu Asn
805 810 815
Gln Ser Asn Phe Gln Lys Met Tyr Gln Met Phe Asn Glu Thr Thr Ser
820 825 830
Gln Val Arg Lys Tyr Gln Gln Asn Met Ser His Leu Glu Glu Lys Leu
835 840 845
Leu Leu Thr Thr Lys Ile Ser Lys Asn Phe Glu Thr Arg Leu Gln Asp
850 855 860
Ile Glu Ser Lys Val Thr Gln Thr Leu Ile Pro Tyr Tyr Ile Ser Val
865 870 875 880
Lys Lys Gly Ser Val Val Thr Asn Glu Arg Asp Gln Ala Leu Gln Leu
885 890 895
Gln Val Leu Asn Ser Arg Phe Lys Ala Leu Glu Ala Lys Ser Ile His
900 905 910
Leu Ser Ile Asn Phe Phe Ser Leu Asn Lys Thr Leu His Glu Val Leu
915 920 925
Thr Met Cys His Asn Ala Ser Thr Ser Val Ser Glu Leu Asn Ala Thr
930 935 940
Ile Pro Lys Trp Ile Lys His Ser Leu Pro Asp Ile Gln Leu Leu Gln
945 950 955 960
Lys Gly Leu Thr Glu Phe Val Glu Pro Ile Ile Gln Ile Lys Thr Gln
965 970 975
Ala Ala Leu Ser Asn Ser Thr Cys Cys Ile Asp Arg Ser Leu Pro Gly
980 985 990
Ser Leu Ala Asn Val Val Lys Ser Gln Lys Gln Val Lys Ser Leu Pro
995 1000 1005
Lys Lys Ile Asn Ala Leu Lys Lys Pro Thr Val Asn Leu Thr Thr Val
1010 1015 1020
Leu Ile Gly Arg Thr Gln Arg Asn Thr Asp Asn Ile Ile Tyr Pro Glu
1025 1030 1035 1040
Glu Tyr Ser Ser Cys Ser Arg His Pro Cys Gln Asn Gly Gly Thr Cys
1045 1050 1055
Ile Asn Gly Arg Thr Ser Phe Thr Cys Ala Cys Arg His Pro Phe Thr
1060 1065 1070
Gly Asp Asn Cys Thr Ile Lys Leu Val Glu Glu Asn Ala Leu Ala Pro
1075 1080 1085
Asp Phe Ser Lys Gly Ser Tyr Arg Tyr Ala Pro Met Val Ala Phe Phe
1090 1095 1100
Ala Ser His Thr Tyr Gly Met Thr Ile Pro Gly Pro Ile Leu Phe Asn
1105 1110 1115 1120
Asn Leu Asp Val Asn Tyr Gly Ala Ser Tyr Thr Pro Arg Thr Gly Lys
1125 1130 1135
Phe Arg Ile Pro Tyr Leu Gly Val Tyr Val Phe Lys Tyr Thr Ile Glu
1140 1145 1150
Ser Phe Ser Ala His Ile Ser Gly Phe Leu Val Val Asp Gly Ile Asp
1155 1160 1165
Lys Leu Ala Phe Glu Ser Glu Asn Ile Asn Ser Glu Ile His Cys Asp
1170 1175 1180
Arg Val Leu Thr Gly Asp Ala Leu Leu Glu Leu Asn Tyr Gly Gln Glu
1185 1190 1195 1200
Val Trp Leu Arg Leu Ala Lys Gly Thr Ile Pro Ala Lys Phe Pro Pro
1205 1210 1215
Val Thr Thr Phe Ser Gly Tyr Leu Leu Tyr Arg Thr
1220 1225

<210> 130

<211> 4

<212> PRT

<213> Artificial Sequence

<220>
<223> adhesive motif

<400> 130
Arg Gly Asp Ser
1

<210> 131
<211> 149
<212> PRT
<213> Homo sapiens

<400> 131
Val Ala Ala Arg Pro Pro Val Ser Arg Met Glu Pro Arg Ala Ala Asp
1 5 10 15
Gly Cys Phe Leu Gly Asp Val Gly Phe Trp Val Glu Arg Thr Pro Val
20 25 30
His Glu Ala Ala Gln Arg Gly Glu Ser Leu Gln Leu Gln Leu Ile
35 40 45
Glu Ser Gly Ala Cys Val Asn Gln Val Thr Val Asp Ser Ile Thr Pro
50 55 60
Leu His Ala Ala Ser Leu Gln Gly Gln Ala Arg Cys Val Gln Leu Leu
65 70 75 80
Leu Ala Ala Gly Ala Gln Val Asp Ala Arg Asn Ile Asp Gly Ser Thr
85 90 95
Pro Leu Cys Asp Ala Cys Ala Ser Gly Ser Ile Glu Cys Val Lys Leu
100 105 110
Leu Leu Ser Tyr Gly Ala Lys Val Asn Pro Pro Leu Tyr Thr Ala Ser
115 120 125
Pro Leu His Glu Ala Ser Phe Pro Arg Leu Leu Ser Thr Leu Ala Ser
130 135 140
Thr Pro Trp Ile Asn
145

<210> 132
<211> 206
<212> PRT
<213> Homo sapiens

<400> 132
Met Ala Ala Asn Lys Pro Lys Gly Gln Asn Ser Leu Ala Leu His Lys
1 5 10 15
Val Ile Met Val Gly Ser Gly Gly Val Gly Lys Ser Ala Leu Thr Leu
20 25 30
Gln Phe Met Tyr Asp Glu Phe Val Glu Asp Tyr Glu Pro Thr Lys Ala
35 40 45
Asp Ser Tyr Arg Lys Lys Val Val Leu Asp Gly Glu Glu Val Gln Ile
50 55 60
Asp Ile Leu Asp Thr Ala Gly Gln Glu Asp Tyr Ala Ala Ile Arg Asp
65 70 75 80
Asn Tyr Phe Arg Ser Gly Glu Gly Phe Leu Cys Val Phe Ser Ile Thr
85 90 95
Glu Met Glu Ser Phe Ala Ala Thr Ala Asp Phe Arg Glu Gln Ile Leu
100 105 110
Arg Val Lys Glu Asp Glu Asn Val Pro Phe Leu Leu Val Gly Asn Lys
115 120 125
Ser Asp Leu Glu Asp Lys Arg Gln Val Ser Val Glu Glu Ala Lys Asn
130 135 140
Arg Ala Glu Gln Trp Asn Val Asn Tyr Val Glu Thr Ser Ala Lys Thr
145 150 155 160

Arg Ala Asn Val Asp Lys Val Phe Phe Asp Leu Met Arg Glu Ile Arg
 165 170 175
 Ala Arg Lys Met Glu Asp Ser Lys Glu Lys Asn Gly Lys Lys Arg
 180 185 190
 Lys Ser Leu Ala Lys Arg Ile Arg Glu Arg Cys Cys Ile Leu
 195 200 205

<210> 133
 <211> 431
 <212> PRT
 <213> Homo sapiens

<400> 133
 Met Met Arg Gln Arg Gln Ser His Tyr Cys Ser Val Leu Phe Leu Ser
 1 5 10 15
 Val Asn Tyr Leu Gly Gly Thr Phe Pro Gly Asp Ile Cys Ser Glu Glu
 20 25 30
 Asn Gln Ile Val Ser Ser Tyr Ala Ser Lys Val Cys Phe Glu Ile Glu
 35 40 45
 Glu Asp Tyr Lys Asn Arg Gln Phe Leu Gly Pro Glu Gly Asn Val Asp
 50 55 60
 Val Glu Leu Ile Asp Lys Ser Thr Asn Arg Tyr Ser Val Trp Phe Pro
 65 70 75 80
 Thr Ala Gly Trp Tyr Leu Trp Ser Ala Thr Gly Leu Gly Phe Leu Val
 85 90 95
 Arg Asp Glu Val Thr Val Thr Ile Ala Phe Gly Ser Trp Ser Gln His
 100 105 110
 Leu Ala Leu Asp Leu Gln His His Glu Gln Trp Leu Val Gly Gly Pro
 115 120 125
 Leu Phe Asp Val Thr Ala Glu Pro Glu Glu Ala Val Ala Glu Ile His
 130 135 140
 Leu Pro His Phe Ile Ser Leu Gln Gly Glu Val Asp Val Ser Trp Phe
 145 150 155 160
 Leu Val Ala His Phe Lys Asn Glu Gly Met Val Leu Glu His Pro Ala
 165 170 175
 Arg Val Glu Pro Phe Tyr Ala Val Leu Glu Ser Pro Ser Phe Ser Leu
 180 185 190
 Met Gly Ile Leu Leu Arg Ile Ala Ser Gly Thr Arg Leu Ser Ile Pro
 195 200 205
 Ile Thr Ser Asn Thr Leu Ile Tyr Tyr His Pro His Pro Glu Asp Ile
 210 215 220
 Lys Phe His Leu Tyr Leu Val Pro Ser Asp Ala Leu Leu Thr Lys Ala
 225 230 235 240
 Ile Asp Asp Glu Glu Asp Arg Phe His Gly Val Arg Leu Gln Thr Ser
 245 250 255
 Pro Pro Met Glu Pro Leu Asn Phe Gly Ser Ser Tyr Ile Val Ser Asn
 260 265 270
 Ser Ala Asn Leu Lys Val Met Pro Lys Glu Leu Lys Leu Ser Tyr Arg
 275 280 285
 Ser Pro Gly Glu Ile Gln His Phe Ser Lys Phe Tyr Ala Gly Gln Met
 290 295 300
 Lys Glu Pro Ile Gln Leu Glu Ile Thr Glu Lys Arg His Gly Thr Leu
 305 310 315 320
 Val Trp Asp Thr Glu Val Lys Pro Val Asp Leu Gln Leu Val Ala Ala
 325 330 335
 Ser Ala Pro Pro Phe Ser Gly Ala Ala Phe Val Lys Glu Asn His
 340 345 350
 Arg Gln Leu Gln Ala Arg Met Gly Asp Leu Lys Gly Val Leu Asp Asp
 355 360 365
 Leu Gln Asp Asn Glu Val Leu Thr Glu Asn Glu Lys Glu Leu Val Glu
 370 375 380

Gln Glu Lys Thr Arg Gln Ser Lys Asn Glu Ala Leu Leu Ser Met Val
 385 390 395 400
 Glu Lys Lys Gly Asp Leu Ala Leu Asp Val Leu Phe Arg Ser Ile Ser
 405 410 415
 Glu Arg Asp Pro Tyr Leu Val Ser Tyr Leu Arg Gln Gln Asn Leu
 420 425 430

<210> 134
 <211> 672
 <212> PRT
 <213> Homo sapiens

<400> 134
 Met Gly Val Gly Arg Leu Asp Met Tyr Val Leu His Pro Pro Ser Ala
 1 5 10 15
 Gly Ala Glu Arg Thr Leu Ala Ser Val Cys Ala Leu Leu Val Trp His
 20 25 30
 Pro Ala Gly Pro Gly Glu Lys Val Val Arg Val Leu Phe Pro Gly Cys
 35 40 45
 Thr Pro Pro Ala Cys Leu Leu Asp Gly Leu Val Arg Leu Gln His Leu
 50 55 60
 Arg Phe Leu Arg Glu Pro Val Val Thr Pro Gln Asp Leu Glu Gly Pro
 65 70 75 80
 Gly Arg Ala Glu Ser Lys Glu Ser Val Gly Ser Arg Asp Ser Ser Lys
 85 90 95
 Arg Glu Gly Leu Leu Ala Thr His Pro Arg Pro Gly Gln Glu Arg Pro
 100 105 110
 Gly Val Ala Arg Lys Glu Pro Ala Arg Ala Glu Ala Pro Arg Lys Thr
 115 120 125
 Glu Lys Glu Ala Lys Thr Pro Arg Glu Leu Lys Lys Asp Pro Lys Pro
 130 135 140
 Ser Val Ser Arg Thr Gln Pro Arg Glu Val Arg Arg Ala Ala Ser Ser
 145 150 155 160
 Val Pro Asn Leu Lys Lys Thr Asn Ala Gln Ala Ala Pro Lys Pro Arg
 165 170 175
 Lys Ala Pro Ser Thr Ser His Ser Gly Phe Pro Pro Val Ala Asn Gly
 180 185 190
 Pro Arg Ser Pro Pro Ser Leu Arg Cys Gly Glu Ala Ser Pro Pro Ser
 195 200 205
 Ala Ala Cys Gly Ser Pro Ala Ser Gln Leu Val Ala Thr Pro Ser Leu
 210 215 220
 Glu Leu Gly Pro Ile Pro Ala Gly Glu Glu Lys Ala Leu Glu Leu Pro
 225 230 235 240
 Leu Ala Ala Ser Ser Ile Pro Arg Pro Arg Thr Pro Ser Pro Glu Ser
 245 250 255
 His Arg Ser Pro Ala Glu Gly Ser Glu Arg Leu Ser Leu Ser Pro Leu
 260 265 270
 Arg Gly Gly Glu Ala Gly Pro Asp Ala Ser Pro Thr Val Thr Thr Pro
 275 280 285
 Thr Val Thr Thr Pro Ser Leu Pro Ala Glu Val Gly Ser Pro His Ser
 290 295 300
 Thr Glu Val Asp Glu Ser Leu Ser Val Ser Phe Glu Gln Val Leu Pro
 305 310 315 320
 Pro Ser Ala Pro Thr Ser Glu Ala Gly Leu Ser Leu Pro Leu Arg Gly
 325 330 335
 Pro Arg Ala Arg Arg Ser Ala Ser Pro His Asp Val Asp Leu Cys Leu
 340 345 350
 Val Ser Pro Cys Glu Phe Glu His Arg Lys Ala Val Pro Met Ala Pro
 355 360 365
 Ala Pro Ala Ser Pro Gly Ser Ser Asn Asp Ser Ser Ala Arg Ser Gln
 370 375 380

Glu	Arg	Ala	Gly	Gly	Leu	Gly	Ala	Glu	Glu	Thr	Pro	Pro	Thr	Ser	Val
385					390					395					400
Ser	Glu	Ser	Leu	Pro	Thr	Leu	Ser	Asp	Ser	Asp	Pro	Val	Pro	Leu	Ala
			405						410					415	
Pro	Gly	Ala	Ala	Asp	Ser	Asp	Glu	Asp	Thr	Glu	Gly	Phe	Gly	Val	Pro
			420					425					430		
Arg	His	Asp	Pro	Leu	Pro	Asp	Pro	Leu	Lys	Val	Pro	Pro	Pro	Leu	Pro
		435					440					445			
Asp	Pro	Ser	Ser	Ile	Cys	Met	Val	Asp	Pro	Glu	Met	Leu	Pro	Pro	Lys
	450					455					460				
Thr	Ala	Arg	Gln	Thr	Glu	Asn	Val	Ser	Arg	Thr	Arg	Lys	Pro	Leu	Ala
					470					475					480
Arg	Pro	Asn	Ser	Arg	Ala	Ala	Ala	Pro	Lys	Ala	Thr	Pro	Val	Ala	Ala
					485				490						495
Ala	Lys	Thr	Lys	Gly	Leu	Ala	Gly	Gly	Asp	Arg	Ala	Ser	Arg	Pro	Leu
			500						505					510	
Ser	Ala	Arg	Ser	Glu	Pro	Ser	Glu	Lys	Gly	Gly	Arg	Ala	Pro	Leu	Ser
			515				520					525			
Arg	Lys	Ser	Ser	Thr	Pro	Lys	Thr	Ala	Thr	Arg	Gly	Pro	Ser	Gly	Ser
						535					540				
Ala	Ser	Ser	Arg	Pro	Gly	Val	Ser	Ala	Thr	Pro	Pro	Lys	Ser	Pro	Val
					550					555					560
Tyr	Leu	Asp	Leu	Ala	Tyr	Leu	Pro	Ser	Gly	Ser	Ser	Ala	His	Leu	Val
				565						570				575	
Asp	Glu	Glu	Phe	Phe	Gln	Arg	Val	Arg	Ala	Leu	Cys	Tyr	Val	Ile	Ser
			580					585					590		
Gly	Gln	Asp	Gln	Arg	Lys	Glu	Glu	Gly	Met	Arg	Ala	Val	Leu	Asp	Ala
			595				600					605			
Leu	Leu	Ala	Ser	Lys	Gln	His	Trp	Asp	Arg	Asp	Leu	Gln	Val	Thr	Leu
			610			615					620				
Ile	Pro	Thr	Phe	Asp	Ser	Val	Ala	Met	His	Thr	Trp	Tyr	Ala	Glu	Thr
					630					635					640
His	Ala	Arg	His	Gln	Ala	Leu	Gly	Ile	Thr	Val	Leu	Gly	Ser	Asn	Gly
				645					650					655	
Met	Val	Ser	Met	Gln	Asp	Asp	Ala	Phe	Pro	Ala	Cys	Lys	Val	Glu	Phe
			660					665						670	

<210> 135

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> epitope tag HIS6

<400> 135

His His His His His His

1

5